

# Late Archaic Settlement on the May River: Data Recovery at the Tree Runner Site (38BU1800), Beaufort County, South Carolina

Prepared for

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#### Abstract

The initial survey of the Palmetto Bluff Phase I development tract identified site 38BU1800, the Tree Runner site (Poplin 2002a:208). Lying in a mature mixed pine and hardwood forest, the site rests near the crest of the bluff overlooking a freshwater marsh of the May River. The Tree Runner site was recommended as potentially eligible for the National Register of Historic Places under Criteria D, due to its potential to add significantly to our understanding of South Carolina's Pre-Contact period (Poplin 2002a:215-216).

As development plans could not be modified to avoid impacting the site, consultations were held between Palmetto Bluff, LLC, and the South Carolina State Historic Preservation Office (SHPO). A Memorandum of Agreement (MOA) was executed among Palmetto Bluff, LLC, the South Carolina Office of Ocean and Coastal Resource Management (OCRM), and the SHPO to address the mitigation of adverse effects. Brockington and Associates conducted Phase III Archaeological Data Recovery excavations in 2003.

The results of Brockington's Phase III Archaeological Data Recovery investigations are presented in this volume. It addresses the archaeological data recovery carried out at the site including a brief overview of the natural environment followed by sections targeting each of the Pre-Contact periods and in particular the Ceramic Late Archaic period. These sections are then followed with a discussion of the previous archaeological research, the current research design, and the field and laboratory methods. Results of data recovery are presented as an overview of the field conditions encountered, soil and stratigraphic determinations, feature descriptions, and artifact analysis chapters. The results are then compiled and integrated into an interpretative discussion of the principal questions outlined in the research design as well as additional topics.

## Acknowledgements

The archaeological investigations conducted at 38BU1800 resulted from a great deal of effort on the behalf of many groups and individuals. Foremost among these is Palmetto Bluff, LLC, of Bluffton, South Carolina, for their gracious support of our research. Ms. Valerie Marcil and Mr. David Crampton have also played integral roles as the agency reviewers for the State of South Carolina Department of Archives and History and the U.S. Army Corps of Engineers, Savannah District, respectively.

Many individuals at Brockington and Associates worked on this project and this volume. All have dedicated their time and expertise in all phases of the operation, since the placement of the first shovel test to finalization of this report. Their effort is very much appreciated. Ms. Dawn Reid and Mr. Michael O'Neal directed the Phase III field excavations and began the process of writing this report.

Ms. Meagan Bruce directed the laboratory analysis. Her efforts and those of the laboratory staff are greatly appreciated. Authors of individual sections include Eric Poplin (The Ceramic Late Archaic Period in Coastal South Carolina); David Lineberry (Lithic Analysis); Dea Mozingo (Archaeobotanical Remains); and Alana Lynch (Faunal Analysis, Appendix D). Ms. Connie Huddleston conducted the ceramic analyses and authored those sections of the report.

Graphics were created, edited and produced by David Diener, Carol Poplin, and Whitney Olvey. Editorial review and support was provided by Jeff Gardner, Eric Poplin, and Sharon Putnam. This volume was produced by Sharon Putnam.

## **Table of Contents**

		Page
Abstract		ii
Acknowledge	ements	iii
List of Figure	es	vi
List of Table	s	viii
Chapter I.	Introduction and Research Design	
	Previous Studies	
	Research Design	
	Report Organization	6
Chapter II.	Methods of Investigation	7
	Field Investigations	7
	Laboratory Methods	9
Chapter III.	Natural and Cultural Setting	12
	Natural Setting	12
	Cultural Setting	15
	The Ceramic Late Archaic Period in Coastal South Carolina	22
Chapter IV.	Results of Field Investigations	31
	Overview	31
	50-by-50-cm Exploratory Units Data	31
	Formal Block Excavations	
Chapter V.	Artifact Analyses	64
	Artifact Assemblage	64
	Ceramic Analysis Methods	
	Ceramic Type Descriptions	

# **Table of Contents (continued)**

		Page
	Preliminary Ceramic Analysis	71
	Detailed Ceramic Analysis	73
	Lithic Analysis	
	Archaeobotanical Remains	
Chapter VI.	Discussion and Interpretations	93
	Absence of Long-Term Occupation Evidence	93
	Comparison With Other Stallings Components	94
	Absence of Soil Features	95
	Conclusion	95
References C	ited	96
Appendix A.	Artifact Catalog	
Appendix B.	Minimum Vessel Analysis Forms	
Appendix C.	Radiocarbon Dating Analysis	
Appendix D.	Faunal Analysis by Alana Lynch	

# **List of Figures**

Figure 1.	Page Topographic map showing location of 38BU1800 within the Palmetto Bluff development tract
Figure 2.	Plan map of 38BU1800
Figure 3.	Excavation of a 50-by-50-cm unit by James Page and Patrick Severts 8
Figure 4.	Plan view of 38BU1800 showing all excavation units
Figure 5.	Representative soil profiles of 50-by-50-cm units
Figure 6.	Stallings ceramic density map based on 50-by-50-cm units
Figure 7.	Plan view of Block A showing Feature 612
Figure 8.	Block A during excavation, looking east
Figure 9.	Block A representative profile
Figure 10.	Stallings sherds in Feature 612
Figure 11.	Block B after excavation, looking east southeast
Figure 12.	Plan view of Block B after excavation, showing Features 605, 608, and 609 44
Figure 13.	Block B representative profile
Figure 14.	Figure 605 profile showing chert core below feature
Figure 15	Plan view of Feature 608 49

# **List of Figures (continued)**

	Page	3
Figure 16.	Plan view of Feature 609	)
Figure 17.	Cluster C, looking east	l
Figure 18.	Plan view of Cluster C	2
Figure 19.	Cluster C representative profile	3
Figure 20.	In situ Stallings sherds from Unit 402, Level 3	5
Figure 21.	Feature 602	7
Figure 22.	Plan view of Feature 601/603	3
Figure 23.	Profile view of Feature 601/603	3
Figure 24.	Photograph and north profile for Unit 408 and Feature 606	)
Figure 25.	Stallings Plain vessels	5
Figure 26.	Stallings Incised vessels	5
Figure 27.	Stallings Separate Punctate vessels	7
Figure 28.	Refuge Simple Stamped vessels	)
Figure 29.	Additional Refuge vessels	)
Figure 30.	Wilmington vessels	3
Figure 31.	Mississippian vessels	5

# **List of Tables**

Table 1.	General References
14010 1.	<b>Contract</b> 1626.66665
Table 2.	Ceramic Sequence for the Southern Coast of South Carolina
Table 3.	Artifacts Recovered From 50-by-50-cm Units
Table 4.	Excavation Units by Area
Table 5.	Artifacts From Block A
Table 6.	Ceramic Types From Block A
Table 7.	Block B Artifacts
Table 8.	Ceramic Types From Block B
Table 9.	Artifacts From Cluster C
Table 10.	Ceramic Types From Cluster C
Table 11.	Shell Recovered (in kg) by Level
Table 12.	List of Cultural Features Identified at 38BU1800
Table 13.	List of Weighed Botanical and Faunal Artifacts
Table 14.	Wentworth's Geological Scale
Table 15.	Sherd Counts by Decoration and Temper
Table 16.	Counts and Percentages of Ceramic Vessels

# **List of Tables (continued)**

Table 17.	Stallings Vessel Attributes	Page
Table 18.	Refuge Vessel Attributes	78
Table 19.	Deptford Vessel Attributes	81
Table 20.	Wilmington Vessel Attributes	82
Table 21.	Mississippian Vessel Attributes	85
Table 22.	Recovered Plant Species by Provenience	91

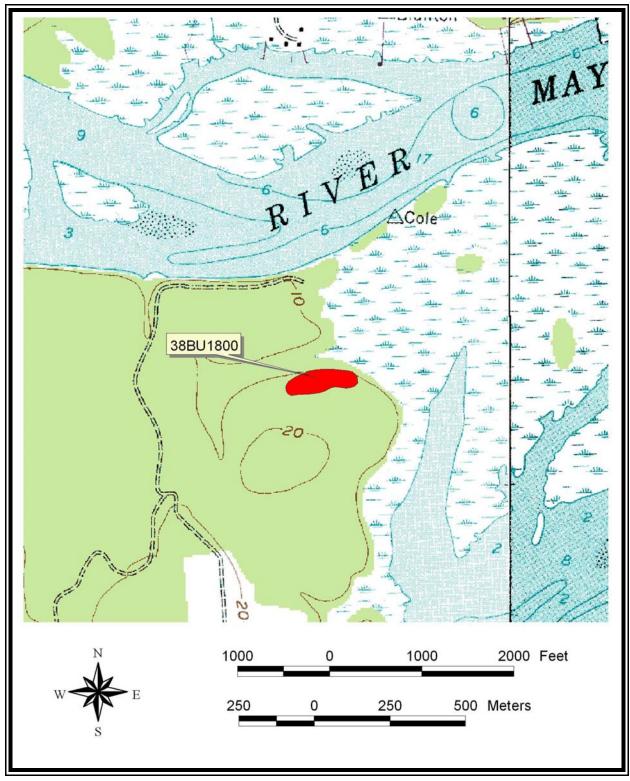
## **Chapter I. Introduction and Research Design**

To comply with applicable federal, state, and local permitting processes, proposed development by Palmetto Bluff, LLC, at the Palmetto Bluff Phase I Development tract in Bluffton, Beaufort County, South Carolina, required the undertaking of archaeological investigations. Survey and testing investigations indicated that site 38BU1800 contained Ceramic Late Archaic (2500-1000 BC) deposits with the potential to add significantly to our understanding of South Carolina's Pre-Contact period (Poplin 2002a:215-216). Poplin (2002a:216) recommended the site as eligible for the National Register of Historic Places (NRHP) under Criteria D. As development plans could not be modified to avoid impacting the site, consultations were held between Palmetto Bluff, LLC, and the South Carolina State Historic Preservation Office (SHPO). A Memorandum of Agreement (MOA) was executed among Palmetto Bluff, LLC, The South Carolina Office of Ocean and Coastal Resource Management (OCRM), and the SHPO to address the mitigation of adverse effects ensuring that valuable archaeological information from 38BU1800 would be recovered and used to increase our knowledge of the coastal region's cultural heritage.

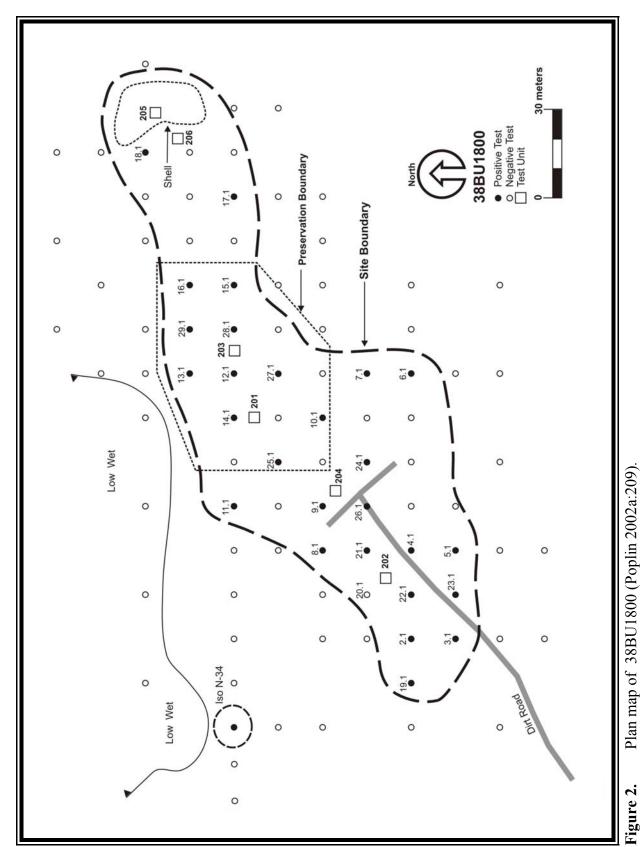
#### **Previous Studies**

The initial survey of the Palmetto Bluff Phase I development tract identified site 38BU1800 (Poplin 2002a:208). Lying in a mature mixed pine and hardwood forest, the site rests near the crest of the bluff overlooking a freshwater marsh of the May River (Figure 1). During survey excavations, positive shovel tests determined site dimensions to be 80 by 195 meters (Figure 2). Poplin (2002a:208) indicated that site soils are "consistent with published descriptions of Seabrook fine sands."

The initial investigation determined the site to be a scatter of Pre-Contact artifacts, with a very low number of historic artifacts associated with a redeposited shell mound at the eastern end of the site (Poplin 2002a:208). Shovel test excavations recovered 33 Pre-Contact Mississippian, Middle Woodland, and Ceramic Late Archaic ceramics (Poplin 2002a:210). After completion of the survey investigations, site 38BU1800 was recommended as potentially eligible for the NRHP.



**Figure 1.** Topographic map showing location of 38BU1800 within the Palmetto Bluff development tract (*Pritchardville* 1971 and *Bluffton* 1972 7.5 minute topographic quadrangles).



Plan map of 38BU1800 (Poplin 2002a:209).

To accurately determine its NRHP eligibility, Brockington and Associates conducted Phase II, testing excavations at the site. This included closer interval (15-meter) shovel testing and the excavation of six test units. Test units included four 1-by-2-meter units, one 1-by-1-meter unit, and one 50-by-50-cm unit (see Figure 2). Artifacts recovered during the archaeological testing correspond to the Ceramic Late Archaic, Woodland, Mississippian, and Post-Contact periods.

Based on testing results, the site was recommended eligible for the NRHP; however, the SHPO agreed that only the central portion of the site contained significant deposits associated with the Ceramic Late Archaic occupation. Based upon these findings, this portion of site 38BU1800 was delineated by a preservation boundary based on its potential to add significant data to our understanding of the Ceramic Late Archaic period (see Figure 2). The remaining portions of the site did not contain artifacts or deposits contributing to its NRHP eligibility (Poplin 2002a:216).

### **Research Design**

Data recovery at 38BU1800 was expected to contribute to existing knowledge about the Ceramic Late Archaic and Woodland occupations in the southern coastal region of South Carolina and in the southeastern United States. Culture history is often based upon artifact classification and artifact assemblages or presumed contemporary artifact associations (Fagan 1987:67, 300-306). A site's artifact assemblage is comprised of all items (including portable artifacts and features) which "exhibit physical attributes that can be assumed to be the result of human activity" (Dunnell 1971:117). Assemblage patterning reflects societal behavior patterns or shared activities of an individual or a community. It is this patterning of contemporary artifact and feature collections which is used to interpret the site occupants' lifeways. Artifact assemblage composition and distribution furnishes valuable information about site structure, activities, and function.

From a research perspective, the key element of substantive archaeological investigations is problem orientation (Fish 1981:1). Archaeological research implies more than simple identification of the presence and quantity of archaeological remains. Recovered data of all types and forms should be used to address current research topics for the region. Orientation and organization of data collection toward a central problem permits archaeologists to identify traits relevant to a given set of questions and allows analyses to interpret data appropriately.

#### Ceramic Late Archaic Research Topics

Settlement/Subsistence Pattern of the Lower Coastal Plain. Most of the Ceramic Late Archaic sites identified in the Lower Coastal Plain region of South Carolina and Georgia consist of shell rings and extensive shell middens, primarily along the salt marsh edges of the immediate coast. With concentrations of artifacts and faunal remains, these sites indicate the presence of large groups of people or the presence of people for longer periods of occupation. Other sites, like 38BU1800, contain small diffuse scatters of ceramic and lithic artifacts. These sites suggest shorter term occupations by smaller groups, probably related to short episodes of resource procurement and processing. The concentration of Ceramic Late Archaic artifacts, in particular Stallings ceramics, at 38BU1800 suggests that the site was used repeatedly, possibly by a single family or task group. There is very little shell present, and none definitively associated with the Ceramic Late Archaic occupation. Thus, the use of 38BU1800 during this period appears different from many other sites in the region. Our analysis will compare this site with others from the area based on ceramic assemblage and shell density.

Detailed analyses of the ceramic vessel types, analysis of lithic and other tool types, and analysis of faunal and floral remains associated with the Ceramic Late Archaic occupation of 38BU1800 can generate information about the function of the site. This information can be compared to data derived from sites along the immediate coast to further our understanding of the region's use during Ceramic Late Archaic period.

Artifact assemblages from additional Palmetto Bluff tract sites contain small Stallings components. Comparisons among these assemblages can contribute to a further understanding of localized subsistence procurement, site use, and seasonal movement. An examination of artifact assemblages from these sites may establish criteria for determining site use.

Temporal Development of the Ceramic Late Archaic Technologies. Sassaman (1991) notes that through time, the nature of Ceramic Late Archaic ceramic assemblages appear to change. Aspects of the ceramic assemblage that reflect these changes include the relative frequencies of Stallings and Thom's Creek wares, the relative frequencies of various surface treatments, changes in vessel form, and the frequency of soapstone vessels. Detailed analyses of the ceramics recovered from 38BU1800 can generate these data and provide comparisons to other sites and Sassaman's (1991) hypothesis on the development of Ceramic Late Archaic technologies and society.

Additional Palmetto Bluff tract sites contain small Stallings components within their assemblages. Relationships among Stallings ceramics from each of these sites can provide the basis for a regional study of Stallings ceramic production technologies.

#### **Report Organization**

Chapter II describes the methods used to investigate 38BU1800, while Chapter III furnishes both an environmental overview and cultural context. Chapter III concludes with an overview of archaeological investigations of Ceramic Late Archaic components in the coastal South Carolina region. Chapter IV provides the results of the field and general laboratory investigations. Chapter V describes the analytical methods and provides results, including the detailed ceramic analyses and the archaeobotanical studies. Chapter VI discusses this site in comparison with other Stallings sites and presents our conclusions.

Appendix A contains the complete artifact catalog. Appendix B presents our minimum vessel analysis forms. Appendix C shows the results of the radiocarbon dating analysis, and Appendix D is the faunal analysis prepared by Alana Lynch.

## **Chapter II. Methods of Investigation**

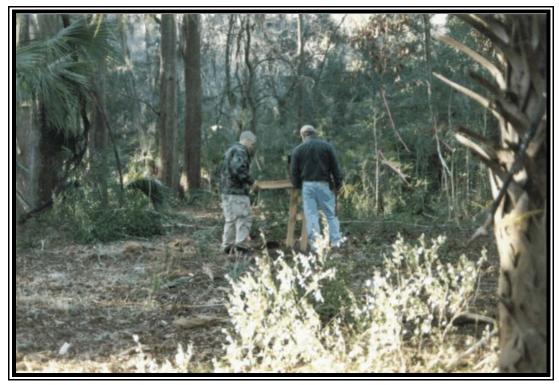
Archaeological data recovery efforts encompass background research, field investigations, and laboratory analyses. Each investigational inquiry results in recovery of valuable data leading to more complete understanding of the various Native American occupations at 38BU1800. This site's investigative plan was designed to address particular research questions (see Chapter 1). Data recovery excavations sampled approximately 120 m², or 4.2 percent of the site's Preservation Area.

#### **Field Investigations**

Data recovery field investigations progressed in several stages and served to confirm and build upon the previously conducted field investigations at the site. The first phase established a site grid. Grid point 500 N 500 E served as the primary datum point, and its elevation was given an arbitrary value of 100. After establishment of several permanent datum points across the site, a 7.5-meter grid was laid out. After establishing western and southern base lines, the remaining grid points were plotted by triangulation from the two baselines using two 100-meter tape measures.

To obtain an accurate representation of the site's topography, technicians recorded numerous points using a digital laser transit with data collector (Total Station). Information recorded for each point consisted of northing and easting positions (used to calculate distance and direction from the datum points) and elevation relative to the datum points. Some grid points and the corners of each large formal excavation unit recorded data points as well. Data collected from each point were entered into *ArcView GIS 3.1* (Environmental Systems Research Institute 1992-1998) to create a detailed topographic representation of the site and surrounding area.

At each 7.5-meter grid point, technicians excavated 50-by-50-cm exploratory units (Figure 3). These units were excavated in natural levels into sterile subsoil, consisting of white sand. Fill was screened through 1/4 inch wire mesh hardware cloth. Shell was not collected from these units, but relative amounts were recorded as low, medium, and high densities. Artifacts were collected and bagged, and grid coordinates were noted on each bag. Field notes on each exploratory unit also included artifact content by level, soil color and texture, and any soil anomalies encountered. Representative soil profiles of some of the units were sketched in field notebooks.



**Figure 3.** Excavation of a 50-by-50-cm unit by James Page and Patrick Severts.

Artifact and shell distributions from the exploratory units were mapped based upon frequency and artifact type using *Surfer for Windows*® (Golden Software, Inc. 1994). We employed these distribution maps, along with feature and midden locations, to select locations for the larger formal block units. Other criteria for the selection of block excavation units included intact soil zones, preserved organics, and general artifact content. This selection process was coordinated with the South Carolina SHPO archaeologist.

Excavation units initially measured 1 by 2 meters and were placed in areas exhibiting potential for intact archaeological deposits. The southeast corner was used as the datum for each unit. Unit expansions depended on recovered artifacts counts and types. Excavations within each unit proceeded by arbitrary 10-cm levels below datum; however, when possible, artifacts coming from different soil horizons within each arbitrary level were also noted. All fill was screened through 1/4-inch wire mesh hardware cloth. Artifacts were collected and bagged; each bag was labeled by provenience, excavation unit, and level. Data from each excavation unit were recorded on standardized unit/level forms. All units were excavated until two consecutive levels failed to yield artifacts. In each unit, one wall (2 meters in length) was chosen to be photographed (35m color and black-and-white) and drawn to scale.

All soil anomalies and identified features were drawn and photographed in plan view. Although feature excavation varied depending on the nature of the feature, the general procedure began with removal of one half of the feature and screening the fill through 1/4 inch wire mesh hardware cloth for artifact recovery. If the feature profile exhibited characteristics of natural processes (e.g., root and/or animal disturbance), excavation of the feature was terminated. If the resultant profile was indicative of a cultural feature, the feature was drawn to scale and photographed. Soils were described by Munsell color designations. The remaining half of the feature was then removed with all fill retained for flotation processing. Oyster shell was weighed and discarded; all other shell species were retained for laboratory analysis. Standardized feature forms were completed for each cultural feature.

#### **Laboratory Methods**

Brockington and Associates, Inc., processed all artifacts, flotation samples, and other materials at their laboratory in Atlanta, Georgia. This laboratory is staffed with specifically trained technicians, with coordination and oversight provided by a laboratory supervisor. In Atlanta, Ms. Meagan Brady serves as laboratory supervisor. Faunal analyses are provided by Ms. Alana Lynch, while Ms. Dea Mozingo serves as our archaeobotanical specialist. She is support by Ms. Jennifer Bedell, archaeobotanical technician. Mr. David Lineberry conducts lithic and shell analysis.

## Artifact Processing

In the laboratory, our staff washed and sorted all artifacts by excavation provenience. They assigned provenience numbers to the collection based on our unique proveniencing scheme. At Brockington and Associates, Inc., Provenience 1 designates general surface collections. Numbers after the decimal point designate subsequent surface collections (or trenches, if excavated). Proveniences 2 to 200 designate shovel tests. Controlled surface collections and 50-by-50-cm units are also designated within this provenience range. Proveniences 201 to 400 designate 1-by-1-meter units done for testing purposes. Proveniences 401 to 600 designate larger formal excavation units (1 by 2 meters, 2 by 2 meters, or larger). Provenience numbers over 600 designate features. The numbers after the decimal point designate levels. For example, Provenience X.0 is a surface collection at a shovel test or unit. Provenience X.1 designates Level 1, as X.2 designates Level 2. Likewise, Provenience 401.2 designates Excavation Unit 401, Level 2. Flotation samples are designated by a 01 added after the level. For example, 401.201 is the flotation material from

Excavation Unit 401, Level 2. Feature proveniences are also followed by a number after the decimal; these numbers may designate levels, halves, or other sections of the feature.

Technicians bagged all artifacts by catalog number in labeled polyethylene self-sealing bags within each provenience. They enclosed archivally stable paper tags that duplicate the bag and catalog information in each individual bag. We compiled all provenience and catalog information into a coded database (Microsoft Access 2002) based on the our institutional group typology system for Pre-Contact sites. Technicians labeled all diagnostic artifacts using Acryloid B72 (either clear or white) and permanent black ink.

Our artifact analysis is based on observable stylistic and technological attributes. For this process, technicians use a number of reputable sources to help identify type and provide descriptions of Pre-Contact lithics and ceramics. Table 1 list our basic sources for this analysis.

Table 1. General References.

Ceramics	Anderson (1996)	Lithics	Anderson et al. (1982)
	Anderson et al. (1982)		Andrefsky (1998)
	Caldwell and McCann (1941)		Cambron and Hulse (1975)
	Caldwell and Waring (1939a, 1939b,		Coe (1964)
	1939c)		Crabtree (1982)
	Coe (1964)		Johnson and Morrow (1987)
	DePratter (1979, 1991)		Powell (1990)
	Espenshade and Brockington (1989)		Whatley (2002)
	Larsen and Thomas (1982)		
	Sassaman (1993a)	Shell/Bone Tools	Espenshade and Brockington (1989)
	Sassaman and Anderson (1995)		Luer et al. (1986)
	Sassaman et al. (1990)		Reiger (1979, 1981)
	South (1973, 1976)		
	South and DePratter 1996		
	Stoltman (1974)		
	Thomas and Larsen (1979)		
	Trinkley (1980a, 1980b, 1989, 1990)		
	Waring (1968a, 1968b)		
	Williams and Shapiro (1990)		
	Williams and Thompson (1999)		

The laboratory takes special precautions for any fragile artifacts. These items are carefully packaged using high quality archival materials to ensure their conservation. Bone items, especially bone tools, are usually cleaned using a dry brush and then coated with a 10 to 15 percent solution of Acryloid B72 for preservation. This same care may be taken with fragile ceramic artifacts.

Detailed ceramic analysis methods and procedures are described in Chapter 5 at the beginning of the analysis section. Lithic and shell analysis methods are also presented at the beginning of their respective sections in Chapter 5.

#### Flotation Samples

Soil samples intended for flotation processing were collected from cultural features. These samples were allowed to air dry before processing with a mechanical flotation system (Wagner 1988:28). During flotation, the unscreened soil is emptied into a modified 189-liter metal drum with water under pressure spraying up into a 0.8-mm screen insert. The soil matrix and materials heavier than water sink to the bottom of the screen insert. Material lighter than water (e.g., plant remains) are washed out of the drum and captured in a fine mesh cloth. The material captured in the screen insert is called heavy fraction and may include artifacts, rocks, and/or shell; the material washed into the mesh cloth is called light fraction and is generally comprised of small roots, seeds, and/or bone. Some of the zooarchaeological remains and all of the archaeobotanical materials were collected from the flotation samples.

#### Curation

All artifacts, project maps, field notes, analysis forms, photographs, and other information generated by this survey will be prepared for storage at a federally approved repository for curation, based on standards outlined in 36 CFR Part 79 (Curation of Federally-Owned and Administered Archaeological Collections; Final Rule). The curation package is currently stored in Brockington and Associates' Atlanta laboratory. Curation of this assemblage will be at the either at Palmetto Bluff (Bluffton, South Carolina) or at the South Carolina Institute of Anthropology and Archaeology (Columbia, South Carolina).

## **Chapter III. Natural and Cultural Setting**

Site 38BU1800 is located on the edge of the May River marsh near Bluffton, South Carolina (see Figure 1). This area is heavily wooded with mature mixed forest of pine and hardwoods. This chapter provides more detailed information on the natural or environmental setting of the Palmetto Bluff area. An understanding of the natural setting is necessary for any interpretation of how native peoples used local resources and adapted to environmental change during their tenure in the area. Our overview of the natural setting is followed by an overview of the cultural environment created by the area's native population. This overview ends with the Contact period. The research focus of these excavations is the site's Stallings component. Given this emphasis, we have presented an expanded cultural setting and a review South Carolina's Ceramic Late Archaic period.

#### **Natural Setting**

#### A Description of the Setting of 38BU1800

Site 38BU1800 is located in the Phase I development tract of Palmetto Bluff. Palmetto Bluff occupies approximately 22,000 acres, the majority of the May River Neck, a peninsula of land between the May River to the north and northeast, the New River/Great Swamp to the west, and the Cooper River to the southeast. The community of Pritchardville lies to the northwest and the center of the Town of Bluffton lies to the northeast on the opposite bank of the May River. South Carolina Routes 46 and 170 effectively separate Palmetto Bluff from other properties on the May River Neck, although there are a number of smaller parcels along these highways near Pritchardville that are not owned by Palmetto Bluff, LLC. To date, approximately 2,678 hectares of uplands within Palmetto Bluff have been surveyed for cultural resources. This includes 681 hectares within the Phase I development tract (Poplin 2002a), 1,871 hectares in the Phase II Development Tract (Baluha et al. 2003), 866 hectares in the Jones/Mainland Tract (O'Neal et al. 2003), 89 hectares in a proposed wastewater effluent plant and along a proposed construction road (Reid 2003), and an additional 36 hectares in other portions of the tract (Hill et al. 1994).

Two modern paved roads extend from SC Route 46 south into Palmetto Bluff. Palmetto Bluff Road is a county-maintained thoroughfare providing access to private lands between Palmetto Bluff and SC Route 46. Palmetto Bluff, LLC, constructed a new primary entrance road to Palmetto

Bluff that extends south from SC Route 46, and lies 61 to 152 meters west of the public road. Inside Palmetto Bluff, Union Camp/International Paper, former owners of Palmetto Bluff, built and maintained an extensive network of roads. Most of these roads have been retained by Palmetto Bluff, LLC, to provide access to the various portions of the tract now under development. Main Road, formerly the primary access road into and through Palmetto Bluff, extends south and east from the entrance, paralleling the May River. This road has a broad right-of-way (approximately 30 to 46 meters) with a two-lane graveled surface. Graded swales, often covered in grass, provide drainage away from the raised roadbed. Main Road follows a route occupied by a road since the eighteenth century. At present, the majority of traffic flows along a series of roads to the south and west of Main Road; all have these roads have raised, gravel roadbeds and graded swales like Main Road within an 18- to 30-meter right-of-way. Secondary roads, usually covered in sand with graded ditches, provide access to other portions of the tract. All of these roads are 9 to 18 meters wide. Narrower roads and trails extend from these primary and secondary roads, and provide wheeled access throughout much of Palmetto Bluff, particularly the better drained areas. Most roads have metal or cement culverts. Low areas have been filled with material taken from borrow pits scattered throughout the tract.

Tidal marshes of the May, Cooper, and New rivers lie within or border the northern, eastern, and southern portions of Palmetto Bluff. As one travels north along the western boundary, these marshes become freshwater swamps associated with the New River or Great Swamp, as it is called at the northwest corner of Palmetto Bluff and farther north. Swamps along the New River/Great Swamp provided rice fields for the antebellum owners of these lands.

A steep bluff rises quickly above the May River on the northern and northeastern edges of Palmetto Bluff, giving the tract its name. As one travels south and west, elevations generally decrease. The uplands merge with tidal wetlands along the New River without a noticeable change in elevation. The highest portions of Palmetto Bluff rise 6 to 9 meters above sea level; the lower areas are 0 to 1.5 meters above sea level. The western portion of Palmetto Bluff, formerly part of the New River Farms or Jones Tract to the west of the May River headwaters, contains upland ridges that rise 9 to 12 meters above sea level. The lowest areas, along the New River/Great Swamp, are only 1.5 to 3 meters above sea level.

Most of the well drained uplands in Palmetto Bluff are covered in mature mixed pine and hardwood forests. Union Camp/International Paper used the eastern portions of Palmetto Bluff as experimental forest lands and a hunting preserve. Wetter areas were planted in pines, using

silvicultural practices common on their other lands in the immediate area (e.g., the Buckwalter Tract to the north of SC Route 46). On the well drained areas along the May River, mature forests with scattered stands of planted pines dominate. More extensive stands of planted pines or managed pine forests lie in the southern and western portions of Palmetto Bluff, where soils are more poorly drained. The western portions of the Palmetto Bluff, formerly a portion of the New River Farms or Jones Tract, contained mature mixed pine and hardwood forests until the middle 1990s. The previous owners sold the timber, resulting in clear cutting of many areas without replanting. Union Camp/International Paper annually burned many forest stands throughout Palmetto Bluff, eliminating dense accumulations of leaf litter and debris as well as thick undergrowth. Wetter areas still can be densely overgrown.

Like most extensive wooded areas in coastal South Carolina, Palmetto Bluff contains a variety of game animals, including deer, turkey, quail, dove, and waterfowl. The marshes and swamps at the head of the May River were impounded to create habitat suitable for waterfowl. Smaller ponds were built where larger drainages flow into the May River. Many are stocked with freshwater game fish (e.g., bass, bream, etc.). Palmetto Bluff contains a large population of feral pigs, despite a continuous program to eliminate or reduce the population. Other animals frequently seen at Palmetto Bluff include alligators, fox squirrels, gray squirrels, opossums, raccoons, and a wide variety of reptiles and amphibians. Wild fowl include numerous species of song birds, raptors, and waterfowl.

#### Regional Climatological Overview

Palmetto Bluff lies in southwestern Beaufort County. Beaufort County lies in the southernmost portion of South Carolina, and has one of the mildest climates in the state (Stuck 1980). The climate is subtropical, with long, hot summers followed by short mild winters. Rainfall is frequent and well-distributed throughout the year. An abundance of moist, warm, unstable air frequently produces scattered showers and thunderstorms.

Average annual rainfall in Beaufort County is approximately 119 cm. The low monthly average occurs in November (3.8 cm), and the high monthly average occurs in July (19 cm). The average annual temperature is 65.6 °F. January is the coldest month of the year with an average of 49 °F, and July is the hottest with an average of 80.5 °F. Beaufort County averages 249 frost-free days per year. The first freezing temperatures usually occur in November.

The tropical storm season runs from June through October. Hurricanes are rare for the area, but tropical storms with winds up to 80 km per hour occur on average of every two to three years. Tornado season runs from March through October, but April and May are the months of greatest tornado hazard (Stuck 1980).

#### Holocene Changes in the Environment

Regional research in palynology, historic biogeography, and coastal geomorphology allows a general reconstruction of the Holocene changes in the environment. Data from Florida, Georgia, North Carolina, and Virginia indicate that the Late Pleistocene was a time of transition from full glacial to Holocene environmental conditions (Gardner 1974; Watts 1980; Whitehead 1965, 1973). Upper Coastal Plain forests of the Late Pleistocene (as reflected in the White Pond pollen record) were dominated by oak, hickory, beech, and ironwood (Watts 1980). The deciduous forest occurred in a cooler, moister climate than exists in the region today (Barry 1980; Braun 1950).

The general warming trend at the onset of the Holocene is reflected in sea level changes. Beginning approximately 17,000 years before present (BP), sea level began to rise from its Late Pleistocene low of approximately 91 meters below modern mean sea level (Brooks et al. 1989; Colquhoun and Brooks 1986; Howard et al. 1980). By 7,000 years BP, sea level had risen dramatically to within 6 meters of present levels.

As drier and warmer conditions became prevalent during the Early Holocene, pines and other species suited to more xeric conditions increased. The southern forest at 7,000 years BP was beginning to resemble that of modern times (Watts 1980). The Early Holocene also was a period of extinction for many large Pleistocene mammals. On a regional level, vegetation and climate have remained effectively static since the Early Holocene.

#### **Cultural Setting**

The cultural history of North America generally is divided into three eras: Pre-Contact, Contact, and Post-Contact. The Pre-Contact era refers to the Native American groups and cultures that were present for at least 10,000 to 12,000 years prior to the arrival of Europeans. The Contact era refers to the time of exploration and initial European settlement on the continent. The Post-Contact era refers to the time after the establishment of European settlements, when Native

American populations usually were in rapid decline. Within these eras, finer temporal and cultural subdivisions have been defined to permit discussions of particular events and the lifeways of the peoples who inhabited North America at that time.

#### Pre-Contact Era

In South Carolina, the Pre-Contact era is divided into four stages (after Willey and Phillips 1958). These include the Lithic, Archaic, Woodland, and Mississippian. Specific technologies and strategies for procuring resources define each of these stages, with approximate temporal limits also in place. Within each stage, with the exception of the Lithic stage, there are temporal periods that are defined on technological bases as well. A brief description of each stage follows. Readers are directed to Goodyear and Hanson (1989) for more detailed discussions of particular aspects of these stages and periods in South Carolina.

Lithic Stage- Paleoindian Period (10000 - 8000 BC). The earliest presence of humans in the Coastal Plain of South Carolina apparently began about 12,000 years ago with movement into the region by hunter-gatherers. Goodyear et al. (1989) review the evidence for the Paleoindian occupation of South Carolina. Based on the distribution of distinctive fluted spear points diagnostic to the period, they see the major sources of highly workable lithic raw materials as the principal determinant of Paleoindian site location, with a concentration of sites at the Fall Line possibly indicating a subsistence strategy of seasonal relocation between the Piedmont and Coastal Plain. Based on data from a number of sites excavated over most of North America, Paleoindian groups were generally nomadic, with subsistence focusing on the hunting of large mammals, specifically the now-extinct mammoth, horse, camel, and giant bison. Groups were probably small, kin-based bands of 50 or fewer persons. As the environment changed at the end of the Wisconsin glaciation, Paleoindian groups had to adapt to new forest conditions in the Southeast and throughout the continent. To date, a single Dalton point recovered from 38BU1787 is the only evidence of Paleoindian occupations discovered at Palmetto Bluff (Shah 2005 [in draft]).

Archaic Stage (8000-1500 BC). The Archaic stage was a long period of adaptation to modern forest conditions in eastern North America. Caldwell (1958) characterizes the period as movement toward Primary Forest Efficiency, meaning that during this period, human groups continually developed new and more effective subsistence strategies for exploiting the wild resources of the modern oak-hickory forest. Based on extensive work in the North Carolina Piedmont, Coe (1964) subdivides the Archaic stage into a number of sequential periods and phases

recognizable by distinctive stone point/knife forms. This sequence has been confirmed over large parts of the Southeast, and is applicable to most parts of South Carolina.

Archaic groups probably moved within a regular territory on a seasonal basis; exploitation of wild plant and animal resources was well planned and scheduled. Anderson and Hanson (1988) developed a settlement model for the Early Archaic period (8000-6000 BC) in South Carolina involving movement of relatively small groups (bands) on a seasonal basis within major river drainages. The Beaufort region is located within the range of the Savannah band. Anderson and Hanson (1988) hypothesize that Early Archaic use of the Lower Coastal Plain was limited to seasonal (spring time) foraging camps and logistic camps. Aggregation camps and winter base camps are suggested to have been near the Fall Line. They also hypothesize that as population increased during the Middle Archaic period (6000-2500 BC), band mobility decreased and territoriality increased. Blanton and Sassaman (1989) reviewed the archaeological literature on the Middle Archaic period. They document an increased simplification of lithic technology during this period, with increased use of expedient, situational tools. Furthermore, they argue that the use of local lithic raw materials is characteristic of the Middle and Late Archaic periods. Blanton and Sassaman (1989:68) conclude that "the data at hand suggest that Middle Archaic populations resorted to a pattern of adaptive flexibility as a response to 'mid-Holocene environmental conditions' such as variable precipitation, sea level rise, and differential vegetational succession." These processes resulted in changes in the types of resources available from year to year. To date, only two sites contain evidence of Early or Middle Archaic occupations (Baluha et al. 2003; Poplin 2002a).

In general, there is evidence of extensive trade networks covering large areas of North America, and of the establishment of sedentary villages during the Late Archaic period (2500-1500 BC). Some of the best evidence of such sedentary villages occurs along the South Carolina coast in the form of large middens of oyster shell and other faunal remains. These refuse heaps probably indicate substantial, relatively long-term habitations. The first evidence of the manufacture and use of ceramics also dates to the Late Archaic. Thirty-nine sites at Palmetto Bluff contain evidence of Ceramic Late Archaic occupations (Baluha et al. 2003; Gardner et al. 2003; Poplin 2002a).

Woodland Stage (1500 - AD 1000). During the Woodland stage, sedentism increased although scheduled exploitation of wild food resources in a seasonal round continued. The Woodland stage is significant for several technological and social developments: (1) the widespread manufacture and use of ceramics for cooking and storage; (2) the beginnings of agriculture; and (3)

the construction of burial mounds and other earthworks. While evidence of burial mounds and agriculture is not extensive at the few South Carolina Woodland sites investigated in detail (Brooks and Canouts 1984; Trinkley 1980a, 1980b, 1990), ceramics are widespread, and have been recovered at numerous small sites throughout the state. The varied manufacturing procedures and decorative styles of these ceramics allow the differentiation of site collections into several periods as well as permit inferences of group movement and influence from adjacent geographic areas. Trinkley (1980b) and Anderson et al. (1982) developed classificatory schemes for Woodland groups based on ceramics from a number of sites. Following Anderson et al. (1982), Poplin et al. (1993) developed a classificatory scheme for the central coast. Table 2 summarizes the current typologies in use for the ceramics from the southern coast. At Palmetto Bluff, Early Woodland components occur at 43 sites; Middle Woodland components occur at 68 sites; and Late Woodland components occur at 14 sites (Baluha et al. 2003; Gardner et al. 2003; Poplin 2002a). Data recovery investigations examined the Middle to Late Woodland occupations at 38BU1787 (Shah 2005 [in draft]) and 38BU1791 (Mozingo 2004 et al.).

Mississippian Stage (AD 1000-1550). The final Pre-Contact stage in South Carolina, the Mississippian, begins about AD 1000 and ends with the arrival and colonization of the area by Europeans in the 1500s and 1600s. During the Mississippian stage, agriculture became well established, and sedentary villages and towns became the dominant habitation type (although relatively isolated farmstead also were common—see Brooks and Canouts 1984). Ferguson (1971) proposes a model of Mississippian settlement involving major political centers dominated and surrounded by smaller villages and farmsteads. Major centers were spaced about 100 miles apart; hypothesized centers in the project region were located at Town Creek (North Carolina), near Camden, Lake Marion, and Charleston (South Carolina), and near Augusta and Savannah (Georgia-Ferguson 1971). Anderson (1989) and DePratter (1989) identify large political centers on the Wateree River (near Camden), on the Oconee River (in central Georgia), and at Savannah (Georgia). These centers usually contained one or more large mounds upon which temples were built. The Mississippian ceremonial center at the original Charles Towne settlement on Albemarle Point (38CH1) contained no mound structure. Mississippian society appears to have been ranked, without economic classes. Forty sites at Palmetto Bluff contain evidence of Mississippian occupations (Baluha et al. 2003; Poplin 2002a). Data recovery investigations at 38BU1791 examined an intensive Late Mississippian occupation (Mozingo 2004 et al.).

Table 2. Ceramic Sequence for the Southern Coast of South Carolina (After Anderson et al. 1982; DePratter 1979; Poplin et al. 1993; Trinkley 1989; Williams and Thompson 1999).

Period/Era Contact	<u><b>Date</b></u> AD 1600 - 1750	Ceramic Types Altamaha Burnished Plain Altamaha Check Stamped Altamaha Complicated Stamped Altamaha Incised Altamaha Red Filmed
Mississippian	AD 1400 - 1600	Irene Complicated Stamped Irene Burnished Plain Irene Incised
	AD 1000 - 1400	Savannah Complicated Stamped Savannah Burnished Plain Savannah Cord Marked Savannah Check Stamped
Late Woodland	AD 700 - 1000	St. Catherines Cord Marked St Catherines Net Impressed St Catherines Fabric Impressed St. Catherines Plain Wilmington Fabric Impressed Wilmington Cord Marked Wilmington Plain
Middle Woodland	AD 200 - 700	Wilmington Check Stamped Wilmington Cord Marked Wilmington Fabric Impressed Wilmington Plain Deptford Cord Marked Deptford Fabric Impressed Deptford Fabric Impressed Deptford Check Stamped Deptford Linear Check Stamped Deptford Simple Stamped Deptford Plain
Early Woodland	1000 BC - AD 200	Deptford Check Stamped Deptford Linear Check Stamped Deptford Simple Stamped Deptford Plain
	1500 - 1000 BC	Refuge Plain Refuge Punctate Refuge Dentate Stamped Refuge Simple Stamped Refuge Incised
Ceramic Late Archaic	2500 - 1000 BC	Thom's Creek Incised Thom's Creek Simple Stamped Thom's Creek Linear Punctate Thom's Creek Drag and Jab Punctate Thom's Creek Plain Stallings Incised Stallings Simple Stamped Stallings Drag and Jab Punctate Stallings Linear Punctate Stallings Plain

#### Contact Era - Exploration and Settlement

European (Spanish) exploration on the South Carolina coast began as early as 1514, and a landing party went ashore in the Port Royal Sound vicinity (now Beaufort County) in 1520 at a spot they named Santa Elena (Hoffman 1983:64; Rowland 1978:1). From that time on, the area was of great interest to both the Spanish and the French. The Spanish did not establish a permanent settlement at that time, however. The first Spaniard to attempt a permanent settlement on the South Carolina coast (in 1526) was San Miguel de Gualdape. The settlement appears to have been in the Winyah Bay area, near Georgetown (Quattlebaum 1955). The French, under Jean Ribault, attempted to establish a settlement in the Port Royal area in 1562. This settlement on Parris Island was called Charlesfort.

This French presence on the South Carolina coast drew the Spanish back to protect their original interests. Spanish forces attacked Charlesfort and established their own settlement of Santa Elena in 1566. Recent archaeological evidence indicates that the Spanish built their new settlement of Santa Elena on top of the destroyed French settlement. Local Indians, the Cusabo, were less than friendly, but despite numerous attacks and several burnings, the Spanish settlers did not abandon Santa Elena until 1587 (Lyon 1984; Rowland 1978:25-57). The Spanish maintained their interest in Santa Elena as part of a series of missions on the Sea Islands from St. Augustine, Florida, through Georgia, and into South Carolina; Spanish friars were at "St. Ellens" when the English explorer William Hilton visited the area in 1663 (Covington 1968:8-9; Hilton 1664:2). During its 20-year existence, Santa Elena served the Spanish as the base for the first serious European explorations into the interior of the state.

Native American groups encountered by the first European explorers probably were living in a way that was very similar to the Late Mississippian groups identified in archaeological sites throughout the Southeast. Indeed, the highly structured society of Cofitachequi, formerly located in central South Carolina and visited by De Soto in 1540, represents an excellent example of the Mississippian social organizations present throughout southeastern North America during the late Pre-Contact era (Anderson 1985). Initial European forays into the Southeast led to the disintegration and collapse of the aboriginal Mississippian social structures; disease, warfare, and European slave raids contributed to the rapid decline of the regional Native populations during the sixteenth century (Dobyns 1983; Ramenofsky 1982; Smith 1984). By the late seventeenth century, Native American groups in coastal South Carolina apparently lived in small, politically and socially autonomous semi-sedentary groups (Waddell 1980). By the middle to late eighteenth century, very few Native

Americans remained in the region; all were displaced or annihilated by the rapidly expanding English colonial settlement of the Carolinas (cf. Bull 1770, cited in Anderson and Logan 1981:24-25).

Groups known to have lived near Palmetto Bluff during the Contact era include the Guale, the Cusabo, and later the Yamasee. The Cusabo, a collection of loosely related and/or affiliated groups, occupied the coastal areas of South Carolina from Charleston Harbor to the Savannah River. The Cusabo apparently had poor relations with the Spanish, suffering frequent attacks from the Spanish in Santa Elena during the late sixteenth century and razing that settlement on two occasions. They remained in the Beaufort area until the early 1700s. The Cusabo received a grant for Polawana Island, east of Beaufort in 1712; in 1738, this land was ceded by the colonial government to a group of Natchez. Whether these Natchez were related to the Cusabo or had derived a claim to Polawana Island from them is unknown (Swanton 1946:128-129).

The Guale lived along the Georgia coast from the Savannah River to St. Andrews Sound. They had continuous, albeit at times strained, relations with the Spanish. Many of the Guale converted to Christianity or regularly visited the Franciscan missions established along the coast. In the 1680s, the Guale asked to be removed to Spanish Florida to avoid the near constant harrassment from northern Native groups and the English settlers of the expanding Carolina colony (Swanton 1946:135-136).

The Yamasee originally occupied lands along the central Georgia coast, centered on the Altamaha River. During the fifteenth and most of the sixteenth century, they moved into settlements created for Native groups near the Spanish missions and settlements of Florida and south Georgia (Swanton 1946:208-209). In 1685, they moved north, severing their ties with the Spanish, and settled in the Beufort area around the newly established settlement of Stuart's Town. Following the Spanish destruction of Stuart's Town, the Yamasee moved farther north, settling between the Ashepoo and Conbahee rivers in todays Colleton County. In the 1690s, the returned to the Beaufort area, where they remained until 1715 (Green 1992:23-28). The Yamasee initiated a war against the English colonists in that year that resulted in their destruction or removal from Carolina by the early 1720s (Swanton 1946:210).

To date, we have little archaeological information about these groups except the Yamasee. Excavations at a number of sites throughout Beaufort and Colleton counties permit the association of a distinct ceramic series, Altamaha, with the Yamasee (DePratter and Green 1990; Green et al.

2000). Although we do not know the exact location of all Yamasee settlements, none have been identified to date on Palmetto Bluff.

#### The Ceramic Late Archaic Period in Coastal South Carolina

As the name implies, the appearance of pottery marks the beginning of the Ceramic Late Archaic period. The earliest documented occurrence of pottery comes from Rabbit Mount (38AL15), a shell midden on the Savannah River in Allendale County, South Carolina. Investigations at Rabbit Mount led by James Stoltman (1966, 1974) recovered charcoal in association with fiber tempered Stallings ceramics that produced uncorrected radiocarbon dates of  $4465 \pm 95$  years before present (BP- note: *present* is 1950 for radiocarbon years) and  $4450 \pm 135$  years BP. This is the earliest documented occurrence of pottery in the Southeast to date.

The earliest ceramic series, containing fiber tempering, was recognized well before Stoltman's (1974) excavations demonstrated the age of this pottery. Griffin (1943) originally defined the type Stallings Plain, based on a sample of 28 sherds recovered from the Chesterfield shell ring (38BU29) near Beaufort, South Carolina (Flannery 1943). This type defines the fiber tempered ceramic series of the Savannah River valley and coastal South Carolina. Again, this was not the earliest recognition of fiber tempered pottery. Earlier excavations at the Deptford site (9CH2) and the Refuge site by Antonio Waring (1968a; Caldwell and Waring 1939a, 1939b) demonstrated the stratigraphic and temporal position of fiber tempered ceramics below and before sand or grog tempered Woodland ceramics. The fiber tempered series on the Georgia coast was called St. Simons or Bilbo, although its definition as a distinct type distinguishable from Stallings is highly debatable (Saunders 2002:20-21). Similar wares, defined as Orange, also were identified along the northern Atlantic and northern Gulf coasts of Florida at the same time (Bullen 1955, 1972; Sassaman 1993a). At this time, the appearance of fiber tempered ceramics in coastal Georgia and Florida appears to postdate its appearance in South Carolina by several centuries. The earliest radiocarbon dates from coastal Georgia place the appearance of fiber tempered ceramics at approximately 4200 BP (Sassaman 1993a). In Florida, the earliest dates for Orange ceramics place its appearance at about 4000 BP (Milanich 1994:86).

Stoltman (1974) defined the Stallings culture on the basis of his excavations at Rabbit Mount and other sites on Groton Plantation. He defined three temporal phases or subdivisions based on the nature of the artifact assemblages found in the different levels of his excavations. Stallings I is the

preceramic occupations that underlie the layers with fiber tempered ceramics. Radiocarbon dates place this phase at 5000-4500 BP. Stallings II witnesses the introduction of fiber tempered ceramics dominated by plain wares; this phase extends from 4500-3700 BP. Decorated fiber tempered ceramics dominate the Stallings III phase, which dates from 3700-3000 BP. DePratter (1979) noted a similar trend in the frequency of plain and decorated fiber tempered ceramics in coastal Georgia sites, prompting the definition of two temporal phases for St. Simons ceramics that are coeval with, if not the same as Stoltman's (1974) Stallings II and III. Plain fiber tempered ceramics dominate the St. Simons I phase, dating from 4200-3700 BP. The increased frequency of decorated types define the St. Simons II phase, which dates from 3700-3000 BP.

More recently, Sassaman (1993a) refined the chronological seriation of fiber tempered ceramics for South Carolina and Georgia based on his work in the middle Savannah River valley and his review of recent investigations at a number of coastal sites. He defines three groups (I, II, and III). Group I, dating from 4500-3800 BP in the interior and 4200-3800 BP on the coast, contains primarily plain ceramics with occasional incised or simple stamped decorations. The only vessel forms are bowls with thickened and flanged lips. An increased frequency of decorations characterize Group II (3800-3400 BP). Incising, punctation, and grooving are common, often with multiple designs on the same vessel; simple stamping is rare. Bowls remain the only form, although thickened and flanged lips disappear during this time. Plain wares again dominate Group III (3400-3000 BP), simple stamped designs reappear, and multiple decorative elements disappear. Bowls remain the only form but none display thickened and flanged lips.

While fiber tempered ceramics are the hallmark of the Ceramic Late Archaic period, sand tempered wares appear on South Carolina coast at approximately the same time. It is unclear at present if the sand tempered ceramics occur in direct association with or slightly later than Stallings ceramics. Conflicting stratigraphic positions occur at several sites. Charcoal from the basal layer of Spanish Mount (38CH62) that contained only sand tempered ceramics produced uncorrected radiocarbon dates of  $4150 \pm 350$  BP and  $3820 \pm 185$  BP, the second oldest dates for ceramic bearing deposits on the Atlantic seaboard.

The Ceramic Late Archaic sand tempered ceramics were defined by Griffin (1945) as Thom's Creek, based on his analysis of a sample of sherds from the Thom's Creek site (38LX2) in the Sandhills of central South Carolina. Like the early researchers of Stallings ceramics (St. Simons or Bilbo in their terminology), early researchers of Thom's Creek ceramics attempted to separate interior and coastal manifestations of this series into distinct types. Coastal types included

Awendaw (Waddell 1965, 1971) and Horse Island (Waddell 1971); interior types remained Thom's Creek. Distinct decorative elements include shell punctate, reed punctate, finger pinched, finger impressed, simple stamped, and plain.

Trinkley (1980a, 1980b) hypothesized that changes in the frequency of these decorative types reflected changes in the Thom's Creek series through time. Anderson (1975; Anderson et al. 1982) suggests an alternate interpretation based on the geographic distributions of the dominant types- reed punctate, shell punctate, and finger pinched/impressed. These types occur in greater frequencies in specific portions of the South Carolina coast, showing concentrations near the Savannah River, to the south of Charleston Harbor, and to the north of Charleston Harbor, respectively. These clusters reflect distinct population groups rather than temporal changes in the Thom's Creek series. Sassaman (1993a) suggests a combination of these interpretations. He sees two major population entities during the earliest phase (Group I); one occupying the Fall Line and adjoining Piedmont and one occupying the Coastal Plain and immediate coast. During the second phase (Group II), these entities are less well defined but two coastal groups emerge- one south of the Savannah River and one north of the Savannah River. During the terminal phase (Group III), a single group covers most of the range of Stallings and Thom's Creek ceramics, with a small distinct group apparent along the central coast of South Carolina between Charleston Harbor and the Santee River.

Cable (1994, 2001, 2002) developed a sequence of temporal phases for Thom's Creek ceramics in central coastal South Carolina based on his review of the information from Spanish Mount, data collected from his survey of Edisto Beach State Park, and data from several large-scale surveys in the Francis Marion National Forest (Cable 2001). These phases include Horse Island (3900-3500 BP), Awendaw (3500-3200 BP), and Wambaw (3200-3000 BP) (Cable 1994, 2001, 2002). The presence of Thom's Creek Plain (30-80%), Separate Reed Punctate (20-50%), and Drag and Jab Punctate (10-40%) types characterize the Horse Island phase. Thom's Creek Finger Pinched (20-80%), Plain (20-80%), and Shell Scraped (10%) define the Awendaw phase. These phases roughly correspond to Sassaman's (1993a) Stallings Groups II and III. The terminal Ceramic Late Archaic Wambaw phase, characterized by Thom's Creek Plain (75-85%), Incised (6-10%), and Shell Scraped (3-10%) may be evident only in the interior coastal areas along the Santee River (Cable 2002). The Wambaw phase concludes this sequence but actually belongs in the Early Woodland period, with its primary markers of Refuge Dentate Stamped and Incised types. Cable (2002) assumes a technological connection between terminal Thom's Creek and Refuge types given the similarities in certain ceramic attributes (e.g., temper size, etc.), and thus, the continuity of the phases from the Ceramic Late Archaic into the Early Woodland period. Espenshade and

Brockington (1989), among others, see these similarities as the flow of information (ceramic attributes) between Ceramic Late Archaic and Early Woodland groups given that types associated with both periods may have been manufactured at 3500-3000 BP.

Other artifacts that constitute the assemblage of Ceramic Late Archaic peoples in coastal South Carolina include stone projectile points, steatite vessels and slabs, whelk shell tools, and worked bone implements. Examination of traits and numbers of these artifacts contributes to our understanding of site use during this period.

Projectile points typically recovered in association with Stallings and Thom's Creek pottery include stemmed varieties very similar to the Savannah River type defined by Coe (1964), although most are smaller than the classic Savannah River points that are the hallmark of the pre-ceramic Late Archaic period in the Piedmont of North Carolina, South Carolina, and Georgia. The frequency of stone tools at sites from the period correlates well with the known outcrops of knappable cherts and related rocks on the Coastal Plain of South Carolina. Steatite items are more common on interior Coastal Plain and Fall Line sites, particularly during Sassaman's (1993a) Stallings Group II phase. Trade in steatite items may have been a major interaction between the interior and coastal peoples. However, the increased manufacture of pottery and its use for direct cooking quickly reduced the coastal peoples' need for this commodity (Sassaman 1993a). Small pieces or fragments occur at many coastal sites. Soot from a number of these fragments produced radiocarbon dates comparable to those produced by soot from vessels and slabs found on interior Coastal Plain sites.

Whelk hammers and picks often are recovered from midden deposits at many sites. These tools likely served in lieu of their stone counterparts in most coastal settings since stone of any time is not readily available in most coastal areas. Like most North American Pre-Contact huntergatherers, Ceramic Late Archaic peoples also manufactured a variety of tools from the bones of animals, including deer antlers. Piercing tools are the most common. Another hallmark of the Ceramic Late Archaic period in coastal South Carolina are the carved bone pins that occur in almost all sites of the period that contain extensive shell deposits. These "pins" are long, polished fragments of deer metapodials, made by splitting the bone longitudinally after the removal of the distal and proximal ends. Stone projectile points likely served as the knives and gouges that carved a groove into the fresh bone, permitting the epiphyses to be snapped off. Then, small stone wedges were inserted into shallow cuts in the wall of the bone shaft and struck with stone, bone/antler, or shell hammers. Pottery sherds, rock fragments, and sand then were employed to polish and shape

the fragments. Elaborate designs were carved into the pins, probably with finer edged stone implements or sturdy flakes.

Today, the Stallings and Thom's Creek ceramic series define the Ceramic Late Archaic period in coastal South Carolina. Drawing on research from the early and middle twentieth century, most researchers assume that the coastal Ceramic Late Archaic peoples were fairly sedentary, living in permanent or semi-permanent settlements scattered along the coast. They visited nearby estuaries and interior rivers, swamps, and uplands to collect specific resources available at those locales. Three basic types of sites are apparent (after DePratter 1979), with possible subtypes for two site types based on site size (after Cable 1993a:202-203). Primary site types include shell rings, amorphous shell middens, and artifacts scatters without shell. The shell middens and non-shell sites can be large or small.

Most of the sites without shell tend to be small scatters of ceramic and lithic artifacts. Small sites occur most frequently in estuarine settings but also have been encountered in more inland settings near the coast (e.g., the CRBC- Pecorelli and Poplin 1998, the Francis Marion National Forest- Cable 2001, the US Navy Weapons Station, Charleston- Bailey and Harvey 2000; Bailey et al. 2002; Brockington et al. 1994). Most of these sites display low artifact densities, although Cable (1993a) suggests that some may be highly disturbed remnants of larger non-shell midden sites. Low artifact densities and small site size suggest that most non-shell sites reflect short-term activities, like hunting camps, resource collection stations, or temporary camps, although they may have been revisited repeatedly. Presumably, only a small group of people (a single family or task group) were present at the site during any single occupation. Given the lack of a shell midden(s) at 38BU1800, our subject site is an example of this site type. Artifact densities are low at 38BU1800 suggesting a typical non-shell site reflecting short-term activities associated with hunting or botanical resource collection. Cable (1993b:108-123, 202-203) noted a similar non-shell midden at 38CN165 in Edisto Beach State Park. Site 38CN165 contained primarily Stallings ceramics. Cable (1993b:203) concludes that 38CN165 reflects an early Ceramic Late Archaic occupation, when shellfish exploitation may not have been as integral a component of the regional subsistence strategy as during later phases of the period.

The amorphous shell middens reflect occupations of longer duration or by more people than most of the non-shell sites. They occur in estuarine settings, where shellfish were readily available and obviously reflect intentional mollusk collection activities. Midden sites can be small to very large. Cable (1993b) notes that small shell middens encountered during the survey of Edisto Beach

State Park produced only Thom's Creek ceramics while small non-shell ring sites produced predominantly Stallings ceramics. This pattern has not been noted during other large-scale surveys near Charleston Harbor. Some of the larger shell middens or mounds include Spanish Mount (38CH62) on Edisto Island, South Carolina (Cable 1993b; Sutherland 1974), and Bilbo in Georgia (Waring 1968b). The larger midden sites likely reflect semi-permanent seasonal settlements occupied by multiple family groups. Site 38CH1781 on James Island, South Carolina, is an example of one such settlement that may be associated with the Lighthouse Point Shell Ring (38CH12). The smaller middens likely reflect single family settlements or task group camps occupied for the exploitation of nearby shellfish beds.

The most distinctive Ceramic Late Archaic sites are shell rings. These doughnut-shaped mounds of shell occur along the coasts of Florida, Georgia, and South Carolina as far north as the Santee River. Shell rings were the focus of much of the early research on Ceramic Late Archaic sites on the coast. Their unique association with the Southeast coast prompted numerous efforts to explain their function in the regional settlement system as well as the actual mechanics of their formation. Following a hiatus of several decades, researchers again turned their attention to these enigmatic sites in the early twenty-first century.

There are two primary interpretations of the role of shell rings and their relationship to other Ceramic Late Archaic site types. Trinkley (1985) and Espenshade et al. (1994), among others, argue for the development of the rings from household refuse. Presumably, family residences were placed in a circular pattern within the settlement, and refuse from these households accumulated in the doughnut-shaped mound around them. The central area (plaza) served as a communal space kept free of refuse. As the midden mound grew, the residences moved on top of the old refuse or to the interior edge of the mound.

Saunders (2002), Sassaman (1993a), and Russo and Saunders (1999) argue for a more ceremonial role for the shell rings. Recent research spearheaded by Saunders and Russo at numerous shell rings and Archaic shell mounds in Florida, Georgia, and South Carolina (e.g., the Fig Island Shell Ring [38CH42]- Saunders 2002) indicates that the shell rings contain some household refuse but almost always contain a loose core deposit of large, clean, whole oyster shell. They believe that nature of this shell and the lack of other refuse and debris in this stratum indicates that these shells were intentionally piled into a doughnut shaped mound. Thus, the rings were intentionally built, possibly at locales where large groups of associated people came together at specific times to conduct the activities necessary to maintain their place within the larger group.

While many early researchers felt that the shell rings had a ceremonial function (e.g., Hemmings 1970; Waring 1968c), recent discoveries of mounds (monumental architecture) in the lower Mississippi Valley and Florida constructed during the Middle Archaic period, possibly as early as 6000 BP (Russo 1996), provide a parallel for the construction of shell rings as monumental structures. Most researchers accept the latter interpretation although the debate over the function of shell rings, like the temporal and typological issues associated with Stallings and Thom's Creek ceramics, is likely to continue.

How these site types constitute the settlement system of coastal peoples during the Ceramic Late Archaic period is less well understood. Following Trinkley (1980b), the shell rings and large shell and non-shell middens were likely occupied year round. The smaller shell middens and nonshell sites were then visited to collect specific resources not available near the larger settlements. Alternatively, the large midden sites, both with and without shell, may have been seasonal settlements occupied for lengthy periods of time. The small shell and non-shell sites reflect local resource procurement activities or the dispersal of the local populations into single family groups during a portion of each year. The rings were occupied on specific occasions when the greater associated population needed or wanted to come together. Sassaman et al. (1990) define a settlement pattern for the Ceramic Late Archaic on the interior Coastal Plain and Fall Line that sees large groups coming together in the spring and summer at specific locations along the Savannah River, presumably to exploit anadromous fish runs common during that time of the year and freshwater shellfish concentrations. During early spring and fall, these groups dispersed into smaller units (several family groups?) who occupied base camps near the confluence of larger tributaries. Small resource collection sites and hunting camps surround these base camps on the nearby uplands and higher in the watersheds. Riparian resources remain important but land-based resources begin to constitute a higher percentage of the daily intake. During the late fall and winter, the population dispersed into individual family groups that traveled throughout the uplands, focusing on the hunting of large and small game and the collection of deciduous masts. This pattern of aggregation in the late spring and summer with dispersal in the fall and winter defined the seasonal round of the Ceramic Late Archaic peoples of the interior Coastal Plain.

Coastal populations presumably moved in a similar pattern, with aggregations at shell rings during one portion of the year, at large shell and non-shell middens during another portion of the year, and dispersal at smaller sites during the winter months. Limited seasonality data from Ceramic Late Archaic sites exist at this time. Trinkley's (1975, 1980b) analysis of zooarchaeological and ethnobotanical materials from Lighthouse Point Shell Ring suggest a year-round occupation of this

site, and led to his interpretation that permanent or semi-permanent settlements were occupied during the Ceramic Late Archaic period in coastal South Carolina. Marrinan's (1975:99) analysis of similar materials from the West Shell Ring on Cannon's Point (9GN76), St. Simons Island, Georgia, indicate a primary spring to fall occupation. Russo's (2002) analysis of similar materials from the most recent Fig Island Shell Ring investigations provide ambiguous information. Fish species may indicate a summer occupation; oyster parasites indicate that these shellfish were collected during the winter. Thus, the shell rings may have been occupied sporadically during the summer months, with some construction occurring during the winter. Presumably, the segments of population that aggregated at the rings are living at the large midden sites during the remainder of the year. The shell midden sites may reflect one season while the non-shell middens may reflect a different season. Smaller more diffuse sites may reflect temporary residences occupied during the winter months, similar to the sites noted for the interior populations well away from the Savannah River.

The exact nature of individual households at Ceramic Late Archaic sites in coastal South Carolina is unclear at present. Trinkley (1975) encountered posts and refuse pits beneath the shell ring deposits at Lighthouse Point, prompting his interpretation of ring formation and function described above, although no pattern of posts defining a structure could be discerned. Researchers at other rings and large shell middens encountered similar features. Unfortunately, none of the investigations at Ceramic Late Archaic sites in coastal South Carolina exposed sufficient space to determine if patterns of posts defining individual houses are present. Excavations at several sites on the Savannah River in the interior Coastal Plain encountered house remnants. Sassaman (1993b) encountered the remnants of two circular houses defined by posts and a possible third residence defined by refuse pits at Mims Point (38ED9). These residences appeared to be arranged in a circular configuration. Ledbetter (1991) encountered a subrectangular Late Archaic pit house at 9WR4 in Georgia. Elliott et al. (1994) exposed six Late Archaic houses at the Lover's Lane site near Augusta, Georgia. All were subrectangular; one was a pit house similar to the one described by Ledbetter (1991).

Subsistence data gathered from numerous sites throughout the region indicate that a broad range of animals and plants were utilized by Ceramic Late Archaic people (Saunders 2002:26). White-tail deer dominate the terrestrial faunal assemblage but a wide variety of smaller animals also are found at most sites. Numerous birds, including both migratory and non-migratory species, also have been found. Fishes constitute a substantial portion if not the bulk of the subsistence base at coastal sites in Florida and Georgia; presumably, coastal residents of South Carolina exploited these

resources in similar frequencies. Fish bones are very common in all of the analyzed materials recovered to date. Obviously, shell fish provided another portion of the diet. However, the relative importance of this resource is difficult to estimate. Despite the preponderance of shellfish remains at many Ceramic Late Archaic sites and the association of possible ceremonial associations with ring mounds built with oyster shell, the relative contribution of mollusck to Ceramic Late Archaic diet is arguable. Early researchers assumed that the association of the earliest artifact assemblages found on the coast with dense shell deposits reflected the focus of Ceramic Late Archaic subsistence practices on shellfish. Such a focus mirrored the adaptations of groups along the major rivers in the interior of the Southeast and in the Midwest. Also, many felt that shellfish provided a stable, predictable resource that could replace a large percentage of the terrestrial species in the diet, thereby reducing the need to constantly move in search of game and promoting sedentism. While Ceramic Late Archaic people in coastal South Carolina apparently were semi-sedentary, they still relied heavily on the game animals of the nearby uplands as a source of food and raw materials. Lastly, plant remains are not abundant but commonly occurring species include hickory, oaks, hackberry, and hawthorn. Undoubtedly, other plants were used, like the yucca and Spanish moss used to temper Stallings pottery, but we have not recovered sufficient quantities of these materials to date to permit their inclusion in the subsistence and resource base of the Ceramic Late Archaic period.

# **Chapter IV. Results of Field Investigations**

#### Overview

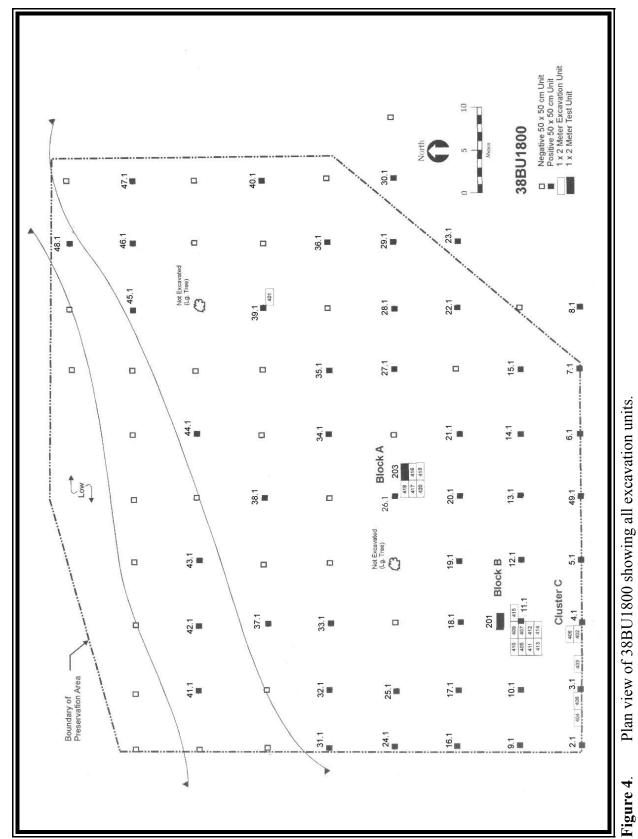
Investigation of 38BU1800, the Tree Runner site, progressed in stages. This site was initially identified and recorded during the survey of the Palmetto Bluff Phase I Development tract (Poplin 2002a). Testing of the site, consisting of short-interval shovel testing and excavation of test units, served to better define the site boundaries and provide information to assess the site's research potential and eligibility for the National Register of Historic Places. These activities led to the development and SHPO approval of a Treatment Plan (Poplin 2002b) focusing on archaeological data recovery of the site's Ceramic Late Archaic component.

The approved Treatment Plan (Poplin 2002b) specified setting up a 7.5-meter grid across the site and excavating 50-by-50-cm units at each grid point. Information provided by these exploratory units, and those excavated during the survey and testing phases, was used to direct the placement of the larger block excavations. Data recovery excavations included a series of 1-by-2-meter formal units that were in some locations excavated together to expose large portions of the surface of the site. These excavations encompassed a total of 40 m². Based on artifact distribution from all previous phases of work, including the 50-by-50-cm units, we divided the block excavations to expose three different loci. This resulted in the excavation of Blocks A (10 m²) and B (18 m²), and Cluster C (10 m²). In addition, Excavation Unit 401 (1 by 1 meter) was placed at Exploratory Unit 39.1 that yielded four Stallings sherds.

Data recovery excavations identified ten (10) cultural features, including concentrations of shell, pottery sherds, and an historic opossum demise. Results of specific data recovery field phases are presented below.

# 50-by-50-cm Exploratory Units Data

Placement of the eighty (80) 50-by-50-cm units is illustrated in Figure 4. Technicians recovered artifacts from forty eight (48) 50-by-50-cm units. Appendix A provides a detailed catalog of the artifacts recovered from these units.



Plan view of 38BU1800 showing all excavation units.

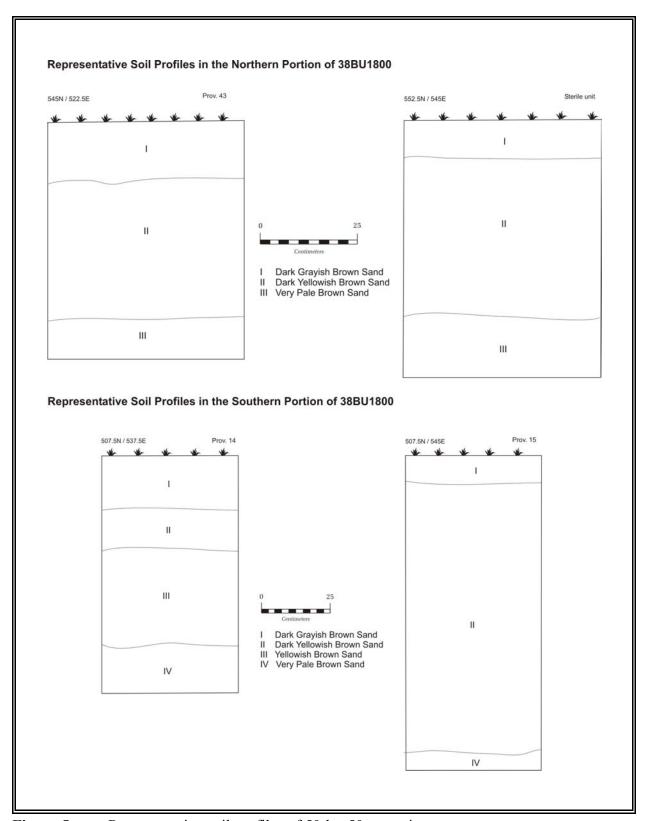
Beneath the root mat, soil in these units consisted of a layer of dark gray brown sand, which continued to a maximum depth of 20 cm below surface (bs). The second layer consisted of sand of various colors including orange, brown, and yellowish brown (tan) to an average depth of 50 cm bs. In some units the second layer extended beyond one (1) meter in depth. In all units, the final layer was sterile white sand. Soils noted during data recovery excavations matched descriptions of Seabrook fine sands noted during the survey and testing phase at this site. Figure 5 shows representative soil profiles of the 50-by-50-cm units in both the northern and southern portions of the site. Artifacts were recovered from Levels I, II, and III.

Table 3 lists the artifacts recovered from the 50-by-50-cm units. Excavation of these units recovered 263 artifacts, including 253 sherds, 2 flakes, 3 flake fragments, 3 pieces of lithic shatter, 1 piece of daub or fired clay, 47.3 grams of animal bone, and 1 olive green bottle glass fragment. Identified ceramic types indicate Ceramic Late Archaic (10 Stallings sherds), Early Woodland (15 Refuge sherds), Middle Woodland (51 Deptford and 13 Wilmington sherds), and Mississippian (3 Irene, Shell Crescent Variant, and 1 untyped Mississippian sherds) components are present at 38BU1800.

Stallings ceramics were recovered from six units in the southern and eastern portions of the investigated area within 38BU1800. These six exploratory units are Proveniences 2.1, 3.1, 6.1, 19.1, 39.1, and 45.1. Data from these units were used to produce density maps showing the distribution of Stallings ceramics (Figure 6). Figure 6 illustrates several concentrations of Stallings ceramics. Two areas at southernmost boundary of the preservation area contained concentrations from 7 to 12 sherds. Two formal excavation units (Units 404 and 408; both 1 by 2 meters) were placed within the westernmost concentration. The heaviest concentration centered on Provenience 19.1 which contained over 25 Stallings ceramic sherds. Block A was placed to the northeast of this provenience while Block B was placed to the southwest.

#### **Formal Block Excavations**

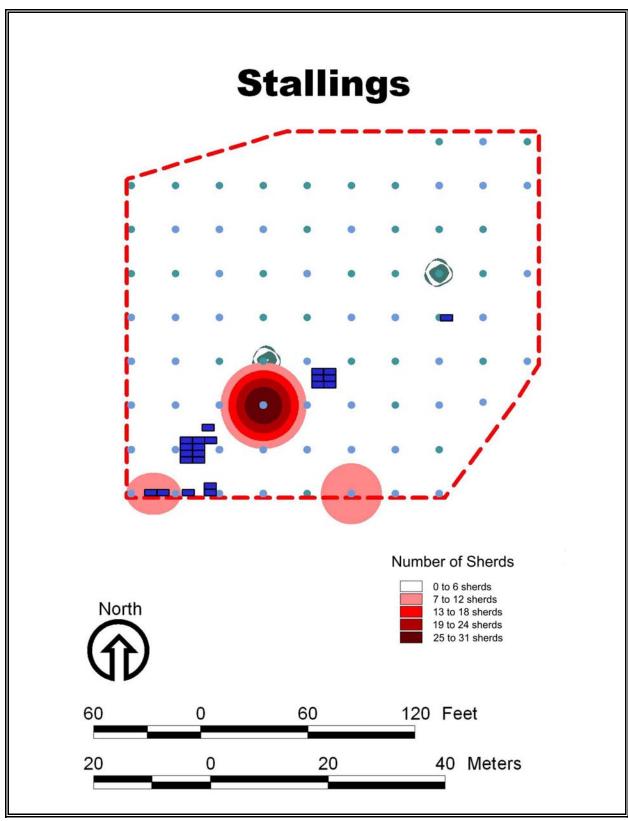
Based upon the relative frequencies of these ceramics, placement of the excavation units was determined. Some were grouped as blocks; however, individual units were also excavated in selected areas to retrieve data from a number of high potential areas. Unit excavations included a



**Figure 5**. Representative soil profiles of 50-by-50-cm units.

Table 3. Artifacts Recovered From 50-by-50-cm Units.

COUNT	WEIGHT	DESCRIPTION	CERAMIC
	(in grams)		TYPE
	47.3	faunal remains	
1	3.9	punctate rim sherd, fiber temper	Stallings
3	37.6	punctate body sherd, fiber temper	Stallings
1	17.1	plain rim sherd, fiber temper	Stallings
5	114.8	plain body sherd, fiber temper	Stallings
8	346.3	simple stamped body sherd, coarse sand temper	Refuge
6	158.1	simple stamped rim sherd, coarse sand temper	Refuge
1	14.5	random incised body sherd, coarse sand temper	Refuge
41	456.2	plain body sherd, coarse sand temper	Deptford
1	8	check stamped body sherd, fine/medium sand temper	Deptford
3	11.8	check stamped body sherd, coarse sand temper	Deptford
3	15.6	cord marked body sherd, fine/medium sand temper	Deptford
2	35.2	cord marked body sherd, very coarse sand temper	Deptford
1	2.3	fabric impressed rim sherd, coarse sand temper	Deptford
10	165.1	cord marked body sherd, grog temper	Wilmington
2	31.6	cord marked rim sherd, grog temper	Wilmington
1	18.2	plain rim sherd, grog temper	Wilmington
1	7.3	complicated stamped body sherd, coarse sand temper	Mississippian
1	13.7	cob impressed body sherd, fine/medium sand temper	Irene, SCV
1	9.2	cob impressed body sherd, coarse sand temper	Irene, SCV
1	3.7	check stamped rim sherd, fine/medium sand temper	Irene, SCV
2	10.4	plain body sherd, fine/medium sand temper	untyped
4	38.9	plain body sherd, coarse sand temper	untyped
1	5.8	plain body sherd, very coarse sand temper	untyped
1	5.1	cord marked body sherd, fine/medium sand temper	untyped
6	38.1	cord marked body sherd, grog temper	untyped
2	9.9	body sherd with unidentifiable decoration, fine/medium sand temper	untyped
2	9.4	body sherd with unidentifiable decoration, coarse sand temper	untyped
1	4.3	eroded body sherd, fine/medium sand temper	untyped
1	6.4	eroded body sherd, very coarse sand temper	untyped
1	6.1	unidentified stamped body sherd, coarse sand temper	untyped
1	6.8	random incised body sherd, coarse sand temper	untyped
4	55.9	plain rim sherd, coarse sand temper	untyped
2	4.1	rim sherd with unidentifiable decoration, coarse sand temper	untyped
132	280.1	residual sherd	
1	7.9	daub or fired clay	
2	0.8	Coastal Plain chert flake	
3	14.6	Coastal Plain chert shatter	
3	6.6	Coastal Plain chert flake fragment	
1	2.7	olive green bottle glass	



**Figure 6**. Stallings ceramic density map based on 50-by-50-cm units.

total of 40 m<sup>2</sup>. Formal unit excavations consisted of twenty 1-by-2-meter units. Since the 50-by-50-cm units did not define any new concentrations of the Late Archaic occupation but reaffirmed the previous findings, these units were placed around areas where higher concentrations of ceramic Late Archaic artifacts (e.g., Stallings fiber tempered sherds) were recovered. Nineteen of the excavated units are divided into Blocks A and B, and Cluster C (see Figure 4). Table 4 lists the different excavation areas and provides provenience information for each area.

Table 4. Excavation Units by Area.

Excavation Area	<b>Unit Provenience</b>	Total Area (square meters)
Unit 401	401	2 m <sup>2</sup>
Block A	416, 417, 418, 419, 420	$10 \text{ m}^2$
Block B	405, 407, 409, 410, 411, 412, 413, 414, 415	$18 \text{ m}^2$
Cluster C	402, 403, 404, 406, 408	10 m <sup>2</sup>

### **Unit 401**

We recovered four Stallings sherds from Exploratory Unit 39.1 (see Figure 4). Based on these data, Unit 401 (1 by 2 meters) was placed adjacent to that Exploratory Unit 39.1. Excavation of Unit 401 proceeded in arbitrary 10-cm levels. Ceramic sherds were recovered in Levels 1 to 5; Levels 6 and 7 were sterile.

Excavation of this 1-by-2-meter unit resulted in the collection of 5 Stallings sherds, 4 Refuge sherds, 1 untyped sherd, and 18 residual sherds. Refuge sherds occurred in Levels 3 and 4, while Stallings sherds were recovered in Levels 3, 4, and 5. Excavations in this portion of the site were abandoned as higher concentrations of Stallings sherds were recovered in the southwestern portion of the examined area.

#### Block A

Formal units in Block A were excavated adjacent to Unit 203 (see Figure 4), which was excavated during Phase II investigations and yielded 29 Stallings sherds (Poplin 2002a). This block consisted of five units (Proveniences 416 - 420) and resulted in the exposure of 10 square meters (Figures 7 and 8). Excavations units in Block A exposed four soil zones. Figure 9 illustrates the

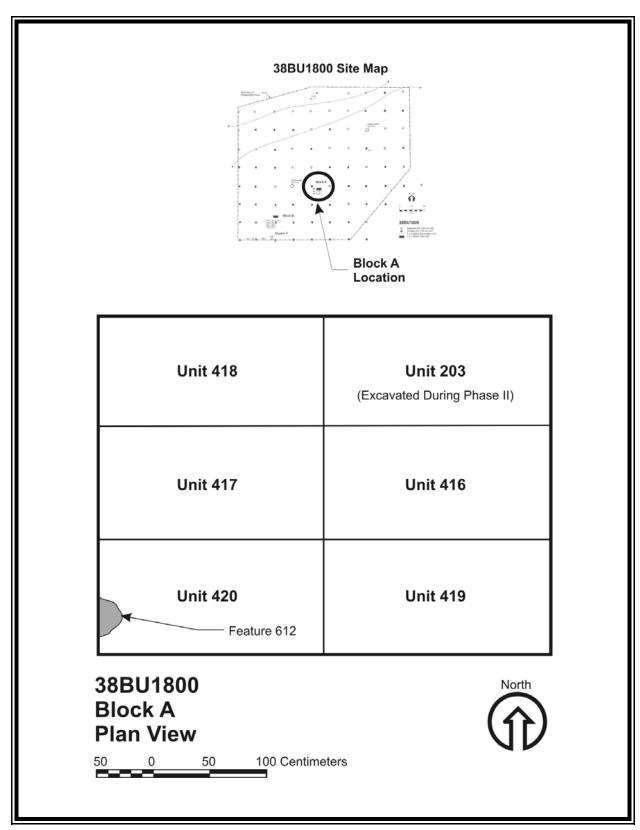


Figure 7. Plan view of Block A showing Feature 612.



**Figure 8**. Block A during excavation, looking east.

south profile of Units 416 and 417. The top zone was the root mat that included a dark brown silty sand to an average depth of 10 cm bs. The second zone was a dark grayish brown silty sand to a depth of 15 to 20 cm bs overlying a yellowish brown sand that varied in depth from 40 to 60 cm bs. The last zone was a very pale brown sterile sand.

Excavation Unit 417 contained a concentration of sherds, likely from one vessel, first noted in Level 3 (20-30 cm bs). These continued into Level 4 (30-40 cm bs). Technicians recovered 10 Stallings sherds from this concentration; eight are plain and two are randomly incised. During excavation of Unit 420, we noted another concentration of Stallings sherds in Levels 2 to 4. This group consisted of five large Stallings sherds and several fiber tempered residual sherds.

Block A produced 211 artifacts. These include 202 ceramic sherds, eight lithic fragments, and one undecorated whiteware sherd. Weighed artifacts include 0.4 grams of animal bone along

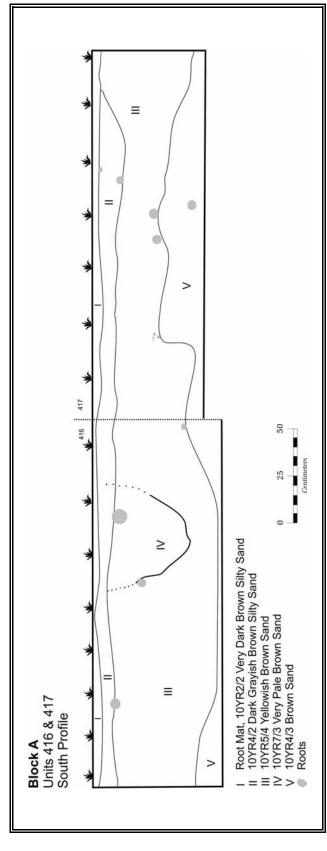


Figure 9. Block A representative profile.

with nut shell, scallop shell, and charcoal. A piece of petrified wood was also recovered. Table 5 presents a summary of the Block A artifacts with counts and weights.

Table 5. Artifacts From Block A.

COUNT	WEIGHT in grams	DESCRIPTION	CERAMIC TYPE
	III gruins		TILL
	0.4	faunal remains	
	6.6	scallop	
	0.2	charcoal	
	0.1	nut	
21	213.5	plain sherd, fiber temper	Stallings
11	135.9	slipped sherd, fiber temper	Stallings
2	122.5	random incised sherd, fiber temper	Stallings
18	172.3	punctate sherd, fiber temper	Stallings
5	63.6	eroded sherd, fiber temper	Stallings
1	20.6	plain sherd, coarse sand temper	Refuge
1	16.5	plain sherd, very coarse sand temper	Refuge
1	60.7	scraped sherd, coarse sand temper	Refuge
2	55.4	simple stamped sherd, coarse sand temper	Refuge
1	16.5	check stamped sherd, coarse sand temper	Deptford
23	339.2	cord marked sherd, grog temper	Wilmington
1	6.1	fabric impressed sherd, grog temper	Wilmington
1	8.9	cord marked sherd, fine/medium sand temper	Savannah
1	6.5	burnished sherd, very coarse sand temper	Mississippian
1	6.8	fabric impressed sherd, fine/medium sand temper	Mississippian
1	4.8	plain sherd, fine/medium sand temper	untyped
1	3.5	plain sherd, coarse sand temper	untyped
1	4.6	check stamped sherd, fine/medium sand temper	untyped
1	4.7	check stamped sherd, coarse sand temper	untyped
1	3.4	check stamped sherd, very coarse sand temper	untyped
1	2.3	cord marked sherd, fine/medium sand temper	untyped
3	15.4	cord marked sherd, coarse sand temper	untyped
1	2	cord marked sherd, fine/medium sand temper	untyped
2	15.4	sherd with unidentifiable decoration, fine/medium sand temper	untyped
1	6.3	sherd with unidentifiable decoration, coarse sand temper	untyped
3	51.7	sherd with unidentifiable decoration, very coarse sand temper	untyped
1	3.6	sherd with unidentifiable decoration, grog temper	untyped
1	3.5	eroded sherd, grog temper	untyped
2	6.4	eroded sherd, very coarse sand temper	untyped
92	140.8	residual sherd	
1	69.2	translucent quartz core fragment	
1	0.3	rhyolite shatter	
2	12	Coastal Plain chert flake	
3	0.5	Coastal Plain chert thinning flake	
1	0.4	Coastal Plain chert flake fragment	
1	2.3	undecorated whiteware	

Table 6 lists the ceramics recovered from Block A. Stallings sherds are identified from all six excavation levels. The highest concentrations appear in Levels 3 and 4 (20-40 cm bs). Wilmington sherds, a Middle Woodland type, appear in Levels 1 through 4 (0-40 cm bs), with the highest concentration in Level 3 (20-30 cm bs). Three Mississippian period sherds appear in Levels 2 and 3 (10-30 cm bs). Levels 5 (40-50 cm bs) and 6 (50-60 cm bs) contained only Stallings ceramics.

Features. During field investigations, archaeologists recorded three possible features (Features 610, 611, and 612) within Block A. After excavation, Features 610 and 611, both amorphous stains in Unit 418, were determined to be non-cultural. Feature 612, the only cultural feature within this block, was located in the southwestern corner of Block A (see Figure 7).

Table 6. Ceramic Types From Block A.

Level 1 0-10 cm bs	Ceramic Type Stallings Wilmington untyped residual sherds TOTAL	Count 12 3 3 18 36
2 10-20 cm bs	Stallings Refuge Deptford Wilmington Mississippian untyped residual sherds TOTAL	3 1 1 7 2 8 27 49
3 20-30 cm bs	Stallings Refuge Wilmington Savannah untyped residual sherds TOTAL	18 4 13 1 7 30 73
4 30-40 cm bs	Stallings Wilmington untyped residual sherds TOTAL	16 1 2 <u>10</u> 29
5 40-50 cm bs	Stallings residual sherds TOTAL	7 <u>7</u> 14
6 50-60 cm bs	Stallings TOTAL	$\frac{1}{I}$

Technicians first identified Feature 612 at the base of Level 2 (approximately 20 cm bs) in Unit 420. This feature consisted of *in situ* sherds (Figure 10). The feature extended into the west wall of the unit, but the portion exposed measured approximately 25 by 17 cm and was 5 cm deep. Technicians pedestaled each sherd encountered during feature excavation; a plan drawing was made and photographs taken before removal of the sherds. All feature fill was screened. Eight Stallings sherds and one flake were recovered.

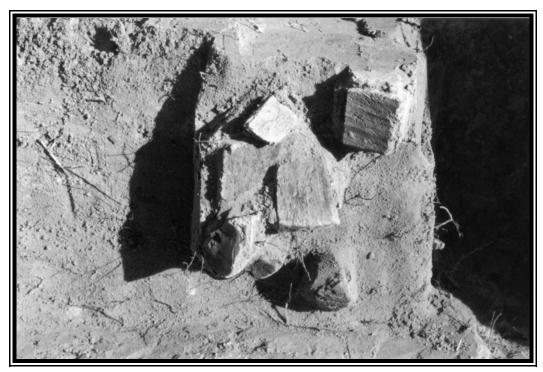


Figure 10. Stallings sherds in Feature 612.

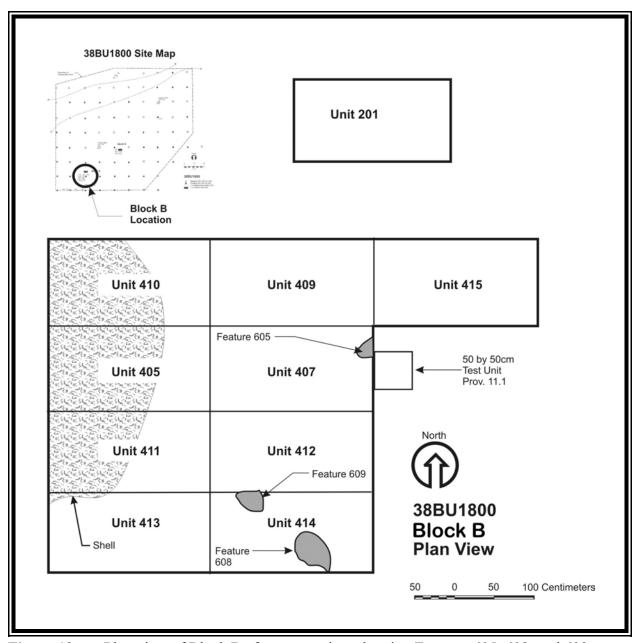
## Block B

We excavated nine 1-by-2-meter units (Units 405, 407, and 409 - 415) in Block B, approximately 1 meter south of Unit 201, which was excavated during the Phase II investigations

(see Figure 4). Previous analysis showed that Unit 201 contained a relatively high frequency of Stallings sherds (Poplin 2002a). Block B resulted in the exposure of 18 square meters. Figure 11 is a photograph of the block after excavation, while Figure 12 shows a plan view of Block B after excavation.



Figure 11. Block B after excavation, looking east southeast.



**Figure 12**. Plan view of Block B after excavation, showing Features 605, 608, and 609.

Excavation units in Block B exposed six separate soil zones. As shown in the profiles for Units 409 and 410 (Figure 13), the root mat included a very dark grayish-brown silty sand and extended to a depth of approximately 10 cm bs. The second zone included brown sand to a depth of approximately 30 cm bs. In Unit 410, this zone contained dense crushed shell, part of a midden that extended over most of the western third of Block B. The third zone was yellowish-brown sand which overlies a light yellowish-brown sand. These last two zones often gently blended together

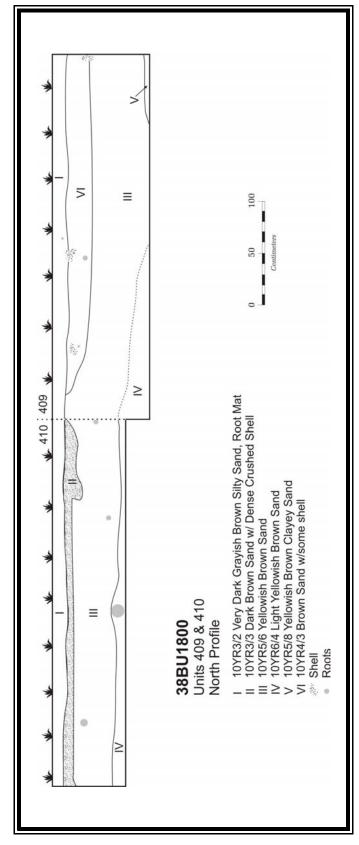


Figure 13. Block B representative profile.

without a distinct boundary. In the northeastern corner of Unit 409, we encountered a zone of yellowish-brown clayey sand.

Technicians excavating Block B recovered 419 artifacts. These include 388 ceramic sherds and 31 lithic fragments. Weighed artifacts include 10.6 grams of animal bone and 6.2 grams of charcoal along with oyster, periwinkle, clam, and whelk shell. We also recovered one piece of petrified wood. Table 7 presents a complete listing of the Block B artifacts with counts and weights.

Table 7. Block B Artifacts.

COUNT	WEIGHT	CERAMIC TYPE	
	(in grams)		
	188.8	faunal remains, intrusive opossum	
	10.6	faunal remains	
	451.9	oyster	
	12.9	clam	
	113.2	whelk	
	103.3	periwinkle	
	175.8	other shell	
	0.4	land snail	
	496.4	residual shell	
	6.2	charcoal	
64	792.4	plain sherd, fiber temper	Stallings
8	90.6	punctate sherd, fiber temper	Stallings
2	83.1	random incised sherd, fiber temper	Stallings
1	2.7	eroded sherd, fiber temper	Stallings
6	8.5	residual sherd	Stallings
11	146.1	simple stamped sherd, coarse sand temper	Refuge
2	41.4	random incised sherd, fine/medium sand temper	Refuge
1	32.1	check stamped sherd, fine/medium sand temper	Deptford
5	64.1	cord marked sherd, very coarse sand temper	Deptford
13	192.8	cord marked sherd, grog temper	Wilmington
1	5.9	cord marked sherd, fine/medium sand temper	Savannah
3	23.5	cob impressed sherds, fine/medium sand temper	Irene, SCV
2	17.6	plain sherd, fine/medium sand temper	untyped
5	50.4	plain sherd, coarse sand temper	untyped
1	6.3	check stamped sherd, coarse sand temper	untyped
1	6.2	cord marked sherd, fine/medium sand temper	untyped
7	32.4	cord marked sherd, very coarse sand temper	untyped
9	82.3	cord marked sherd, grog temper	untyped
2	10.2	fabric impressed sherd, grog temper	untyped
1	3.6	simple stamped sherd, fine/medium sand temper	untyped

Table 7. Continued.

COUNT	WEIGHT (in g)	DESCRIPTION	CERAMIC TYPE
1	2.8	punctate sherd, fine/medium sand temper	untyped
1	3.6	scraped sherd, grog temper	untyped
5	36.9	sherd with unidentifiable decoration, fine/medium sand temper	untyped
7	56.3	sherd with unidentifiable decoration, coarse sand temper	untyped
3	17.6	sherd with unidentifiable decoration, very coarse sand temper	untyped
1	9.6	sherd with unidentifiable decoration, grog temper	untyped
3	14.9	eroded sherd, coarse sand temper	untyped
1	6.4	eroded sherd, very coarse sand temper	untyped
2	7.1	eroded sherd, grog temper	untyped
1	3.2	random incised sherd, fine/medium sand temper	untyped
1	7.7	roughened sherd, fine/medium sand temper	untyped
217	420.2	residual sherd	
1	6.8	rhyolite primary flake	
1	0.3	rhyolite thinning flake	
2	3	rhyolite shatter	
6	4.2	Coastal Plain chert flake	
16	1.81	Coastal Plain chert thinning flake	
1	10.8	Coastal Plain chert shatter	
1	62.5	Coastal Plain chert core fragment	
1	0.6	Coastal Plain chert biface fragment	
2	0.4	Coastal Plain chert flake fragment	

Table 8 presents a list of ceramics by level from Block B. Stallings ceramics occur in every level, with Level 3 (20-30 cm bs) having the highest concentration. Refuge ceramics were recovered in Level 3. Deptford (Early to Late Woodland) ceramics accounted for six sherds in Levels 2 and 3, while Wilmington (Middle to Late Woodland) ceramics were recovered in Levels 1 through 3 (0-30 cm bs). Technicians identified four sherds attributable to the Mississippian period in Level 2 (10-20 cm bs).

These results are almost identical to those of Block A with the exception of Refuge ceramics. In Block A, Refuge ceramics were recovered from Levels 2 and 3 (10-30 cm bs); however in Block B, Refuge ceramics were recovered only in Level 3.

Features. During the excavation of these units, we identified and recorded three features. These features are 605, 608, and 609. Two of these features were located in the southern portion of the block in Unit 414. Feature 605 was located in the northeastern half of the block in Unit 407. A fourth feature excavated as a dog burial (Feature 607) proved to be (after laboratory analysis) an intrusional, intact opossum skeleton. Since it is not related to the Pre-Contact occupation of the site, no further discussion of this feature is presented.

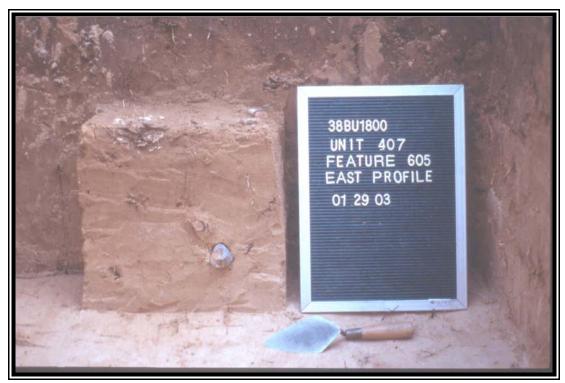
Feature 605 was first identified as an oval stain with a shell concentration and dark brown (7.5 YR 4/4) silty sand in Level 4 (30-40 cm bs) of Unit 407. Feature 605 was approximately 10 by 18 cm in plan and approximately 4 cm deep. This feature was bisected along a north-south axis, and the west half was screened. The east half was retained as a soil sample for flotation

Table 8. Ceramic Types From Block B.

Level 1 0-10 cm bs	Ceramic Type Stallings Wilmington untyped residual sherds TOTAL	Count 7 7 15 53 82
2 10-20 cm bs	Stallings Deptford Wilmington Savannah Irene, SCV untyped residual sherds TOTAL	8 5 4 1 3 30 108 159
3 20-30 cm bs	Stallings Refuge Wilmington Deptford untyped residual sherds TOTAL	46 13 2 1 9 40 111
4 30-40 cm bs	Stallings residual sherds <i>TOTAL</i>	16 <u>8</u> 24
5 40-50 cm bs	Stallings residual sherds TOTAL	4 <u>8</u> 12

processing. The west half of the feature yielded 0.25 kg of razor clam shell. One chert core was recovered 10 cm below the feature. Figure 14 shows this feature pedestal with the core in situ. A sample of the razor clam was submitted for radiocarbon dating, resulting in a calibrated date of BC 200 to AD 120 (Beta 178647; 2 Sigma Calibration). This date suggests an Early Woodland affiliation for the shell concentration, and that the core may predate the feature.

Feature 608 was first identified as an oblong stain with a cluster of periwinkle shell and dark brown silty sand in Level 2 (10-20 cm bs) of Unit 414 (Figure 15). The dimensions of Feature 608 are approximately 28 by 20 cm and 10 cm deep. This feature was bisected along an east-west axis, and the north half was screened. The south half was retained for flotation processing. The feature's profile exhibited a concave base. Feature 608 contained three Coastal chert thinning flakes and



**Figure 14**. Figure 605 profile showing chert core below feature.



Figure 15. Plan view of Feature 608.

0.5 kg of periwinkle shell. A sample of shell from this concentration was submitted for radiocarbon dating. The calibrated dates obtained are AD 1200 to 1400 (Beta 178648; 2 Sigma Calibration), indicating a Mississippian affiliation for this periwinkle cluster.

Compared to the surrounding matrix, *Feature 609* was first identified as a stain with a higher concentration of shell and brown sand in Level 3 (20-30 cm bs) of Unit 414 (Figure 16). Feature 609 was approximately 8 by 23 cm and was 20 cm deep. This feature was bisected along an eastwest axis, and the north half was screened. The south half was retained for flotation processing. The feature was irregular in profile and extended beyond the north wall of Unit 414. Artifacts recovered from this feature include 11 Wilmington Cord Marked sherds, 2 eroded grog tempered sherds, and 8 residual sherds. Field technicians weighed and discarded 0.25 kg of shell from the north half. Flotation of the south half recovered 451.9 grams of oyster, 22 grams of periwinkle, and 12.9 grams of clam shell. Based on the presence of Wilmington Cord Marked sherds, this feature dates to the Woodland period.



Figure 16. Plan view of Feature 609.

### Cluster C

Cluster C (see Figure 4) consists of three separate groups of formal units placed along the southern base line of the preservation area. Cluster C contains Units 402 through 404, 406, and 408 (Figures 17 and 18). This area was chosen due to the density of Stallings sherds recovered from the 50-by-50-cm exploratory units excavated in this area (see Figure 4) and the presence of Feature 601, a shell concentration, also identified during testing. These units were spaced to investigate a longer profile along an area that was previously shown to include small concentrations of shell.



Figure 17. Cluster C, looking east.

Figure 19 shows a typical soil profile from Cluster C. In Unit 406, the first zone included the root mat and very dark grayish-brown silty sand to a depth of approximately 10 cm. The second zone was mottled dark yellowish-brown sand and very dark grayish-brown sand to a depth of approximately 20 cm. The third zone was a dark yellowish-brown sand that was found to a depth of 80 cm in some areas. Other soils encountered at greater depths include very pale brown sand,

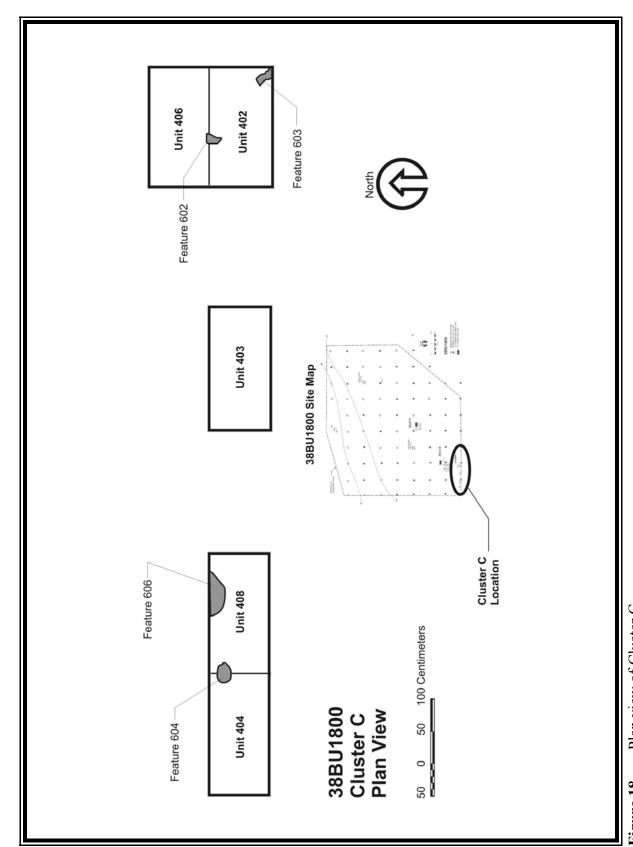


Figure 18. Plan view of Cluster C.

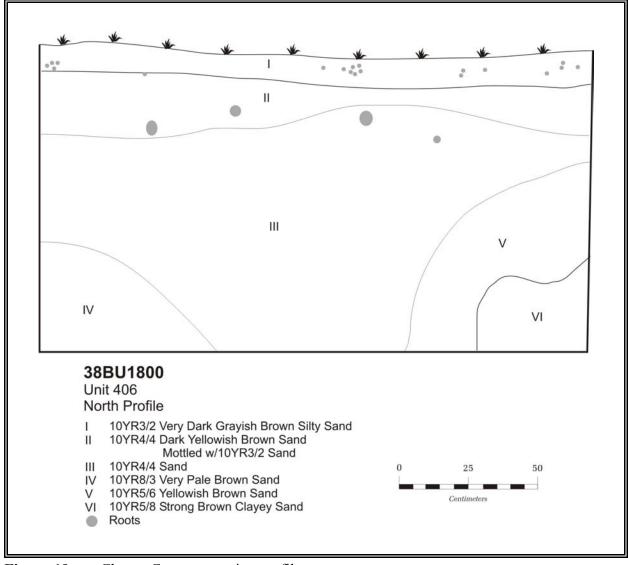


Figure 19. Cluster C representative profile.

yellowish-brown sand, and strong brown clayey sand. These soils were often found beginning in the third zone.

Cluster C produced 293 artifacts. These include 286 ceramic sherds and 7 lithic fragments. Weighed artifacts include 12.7 grams of animal bone and 7.4 grams of charcoal along with oyster, clam, scallop, and whelk shell. We also recovered one piece of petrified wood. Table 9 presents a complete listing of the Cluster C artifacts with counts and weights.

Table 9. Artifacts From Cluster C.

COUNT	WEIGHT (in grams)	DESCRIPTION	CERAMIC TYPE
	3.5	unglazed brick fragments	
	12.7	faunal remains	
	1275.6	oyster	
	12.3	clam	
	16.4	whelk	
	101.5	other shell	
	1.2	scallop	
	11.9	residual shell	
	7.4	charcoal	
	0.3	nut	
33	465.9	plain sherd, fiber temper	Stallings
1	14.5	burnished sherd, fiber temper	Stallings
9	118.6	punctate sherd, fiber temper	Stallings
8	134.4	random incised sherd, fiber temper	Stallings
7	12.1	residual sherd	Stallings
1	23.5	cord marked sherd, very coarse sand temper	Deptford
1	27.8	fabric impressed sherd, coarse sand temper	Deptford
14	135.2	cord marked sherd, grog temper	Wilmington
4	40.3	fabric impressed sherd, grog temper	Wilmington
1	10.2	sherd with unidentifiable decoration, grog temper	Wilmington
1	5.5	complicated stamped sherd, fine/medium sand temper	Mississippian
2	10.6	curvilinear complicated stamped sherd, coarse sand temper	Mississippian
8	109.6	cord marked sherd, fine/medium temper	Savannah
1	5.1	cob impressed sherd, fine/medium sand temper	Irene, SCV
1	6.4	plain sherd, fine/medium sand temper	untyped
2	9.8	plain sherd, coarse sand temper	untyped
5	21.2	cord marked sherd, fine/medium sand temper	untyped
6	35.9	cord marked sherd, coarse sand temper	untyped
4	41.4	cord marked sherd, very coarse sand temper	untyped
1	1	punctate sherd, coarse sand temper	untyped
1	8.2	sherd with unidentifiable decoration, fine/medium sand temper	untyped
3	24.6	sherd with unidentifiable decoration, coarse sand tempered	untyped
1	9	sherd with unidentifiable decoration, very coarse sand temper	untyped
1	11.4	sherd with unidentifiable decoration, grog temper	untyped
1	4	eroded sherd, fine/medium sand temper	untyped
1	16	eroded sherd, coarse sand temper	untyped
1	4.3	eroded sherd, very coarse sand temper	untyped
1	6.1	eroded sherd, grog temper	untyped
1	15.9	unidentified stamped sherd, coarse sand temper	untyped
1	4.4	random incised sherd, coarse sand temper	untyped
164	318.8	residual sherd	muj pau
1	0.6	rhyolite shatter	
2	2.2	Coastal Plain chert flake	
1	0.2	Coastal Plain chert thinning flake	
1	492	Coastal Plain chert cobble core	
1	4.6	Coastal Plain chert coose core  Coastal Plain chert projectile point mid-section	
1	0.2	Coastal Plain chert flake fragment	

Table 10 presents a list of ceramics by level from Cluster C. Stallings ceramics occur in every level except Level 2 (10-20 cm bs). Level 3 (20-30 cm bs) has the highest concentration of these fiber tempered sherds. Wilmington ceramics were recovered in Levels 2 through 4 (10-40 cm bs). Technicians identified four sherds attributable to the Mississippian period in Level 2 (10-20 cm bs).

Table 10. Ceramic Types From Cluster C.

Level 1 0-10 cm bs	Ceramic Type Stallings untyped residual sherds TOTAL	<u>Count</u> 11 8 25 44	Level 4 30-40 cm bs	Ceramic Type Stallings Wilmington untyped residual sherds TOTAL	Count 8 2 1 16 27
2	Deptford	1			_,
10-20	Wilmington	12	5	Stallings	13
cm bs	Mississippian	3	40-50	residual sherds	<u>8</u> 21
	Irene, SCV	1	cm bs	TOTAL	21
	untyped	11			
	residual sherds	<u>72</u>	6	Stallings	2
	TOTAL	100	50-60	residual sherds	<u>2</u> 4
			cm bs	TOTAL	4
3	Stallings	17	_		_
20-30	Deptford	1	7	Stallings	$\frac{2}{2}$
cm bs	Wilmington	5	60-70	TOTAL	2
	Savannah	8	cm bs		
	untyped	11	0	G. 11.	4
	residual sherds	<u>41</u> 83	8	Stallings	$\frac{4}{4}$
	TOTAL	83	70-80	TOTAL	4
			cm bs		
			9	Stallings	1
			80-90	TOTAL	$\frac{1}{I}$
			cm bs	1011111	-
			\$111 OS		

Two notable differences occur in the types of ceramics recovered in Blocks A and B and Cluster C. First, no Refuge ceramics were recovered in Cluster C. Second, Stallings ceramics continued into Levels 7, 8, and 9 of Unit 403 (Cluster C).

Several Stallings rim sherds were recovered from Unit 402, Level 3 (20-30 cm bs). In situ, two large pieces of charcoal were completely capped by one large rim sherd (Figure 20). A sample of this charcoal was submitted for radiocarbon dating and yielded a calibrated date of 2040 to 1740 BC (Beta 178645; 2 Sigma Calibration). This Late Archaic date is appropriate for the Stallings ceramics found in situ with the charcoal sample.



**Figure 20**. In situ Stallings sherds from Unit 402, Level 3.

*Features.* We identified four features in Cluster C. Features 602, 603, 604, and 606 were recorded during the excavation of the 1-by-2-meter units. Feature 601 was identified during the excavation of a 50-by-50-cm unit located at grid point 500 N 515 E (Provenience 4.1). Feature 601 and 603, identified separately, are contiguous and are discussed as one feature.

Feature 602 is as a cluster of Stallings sherds, in a matrix of light yellow-brown sand mottled with white sand, at the base of Level 4 (approximately 40 cm bs) in Unit 402 (Figure 21). This feature measured approximately 20 by 17 cm and was 7 cm deep. A technician pedestaled the sherds and then removed each individually. Each of the five sherds was very hydrated, and all were allowed to dry before being bagged. This vessel fragment cluster continued down and into the north wall of Unit 403.

Features 601 and 603 were identified as dense shell concentrations and dark grayish-brown sand. The combined feature measured approximately 15 by 16 cm and extended from 30 cm below



Figure 21. Feature 602.

datum in Unit 402 and to 58 cm below datum in the 50-by-50-cm unit (Provenience 4.1). This feature was bisected along an east-west axis and the north half was screened. The portion of the east wall that separated the unit from the 50-by-50-cm unit was removed and screened as well. This revealed a complete view of Feature 603 and its relationship to Feature 601. Together, Features 601 and 603 had a concave shell-lined base and amorphous sides. Figure 22 shows the first indications of this feature in plan view, while Figure 23 shows the exposed profile.



Figure 22. Plan view of Feature 601/603.



Figure 23. Profile view of Feature 601/603.

Two samples were taken for flotation processing from the south half of the feature. The first sample was from the upper 20 cm, and the second sample was from the lower 30 cm of the feature. A total of 0.5 kg of mostly whole oyster shell and a few razor clam shells was recovered. One cord marked sherd from the very top of the feature was also recovered. A shell sample from the lower 30 cm of this feature submitted for radiocarbon dating returned a calibrated date of AD 800 to 1050 (Beta 178646; 2 Sigma Calibration). This indicates a Late Woodland affiliation for this pit.

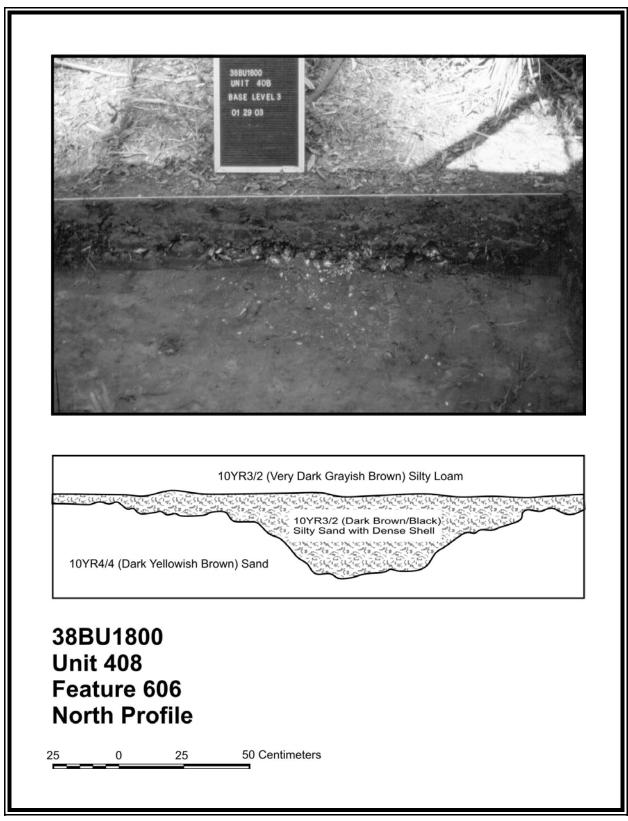
Feature 604 was identified as an oblong stain with some shell in the matrix. Dimensions of this feature were approximately 18 by 18 cm with a depth of 20 cm. This feature straddles the boundary between Units 404 and 408. Technicians bisected Feature 604 along its north-south axis, and the western half (from Unit 404) was screened. The profile was drawn as it appeared in the wall of Unit 404. The eastern half (from Unit 408) was retained for flotation processing. Six Stallings Incised sherds, one plain coarse sand tempered sherd, and four residual sherds were recovered from this feature along with 0.5 kg of shell, that was discarded in the field.

Feature 606 was a circular stain consisting of a dark brown/black silty sand and mostly whole oyster shell. We identified Feature 606 at the base of Level 2, Unit 408; the feature continued to the north into the unexcavated portion of the site. The exposed portion of this feature measured approximately 30 by 100 cm and 30 cm deep. Field technicians excavated the exposed portion of Feature 606 along its east-west axis. The feature profile revealed sloping sides and a flat base (Figure 24).

A total of 2.0 kg of whole oyster shell was recovered from Feature 606. The shell was weighed and discarded. No artifacts were recovered. Artifacts recovered from corresponding soil zones in Unit 408, Levels 2 and 3 (10 to 30 cm bs) include six Wilmington Cord Marked sherds, three untyped sand tempered sherds, two Stallings Incised sherds, and two residual sherds. Based on depth, this shell-filled pit is most likely Woodland in origin; however the mixing of ceramics from two distinct time periods in the surrounding matrix prevents assigning this feature to a specific component.

## Summary of Unit Excavations

Excavation of blocks of units revealed 10 cultural features and recovered a large number of Stallings sherds including two associated clusters of sherds. Charcoal from one of these clusters,



**Figure 24**. Photograph and north profile for Unit 408 and Feature 606.

(Unit 402, Level 3 [20-30 cm bs]) yielded a calibrated radiocarbon date of 2040 to 1740 BC (Beta 178645; 2 Sigma Calibration). This Late Archaic date is appropriate for the Stallings ceramics found in situ with the charcoal sample.

Ceramics recovered from Block A (see Table 6) included Stallings sherds in all six levels. Levels 1 through 4 (0-40 cm bs) contained a mixture of Mississippian, Woodland, and Ceramic Late Archaic sherds. Excavations of Levels 5 and 6 (40-60 cm bs) contained only Stallings sherds. This pattern of vertical distribution is comparable to that observed in Block B. In Block B, Stallings ceramics were recovered in Levels 1 through 5 (0-50 cm bs). In Block B, excavation recovered only Stallings sherds from Levels 4 and 5 (30-50 cm bs). In both blocks, these lower levels that contained only Stallings ceramics consisted of yellowish-brown sand.

In Cluster C, this yellowish-brown sand began in the second zone (about 20 cm bs) and continued into the lower levels of the unit (approximately 90 cm bs) where very pale brown sand, yellowish-brown sand, and strong brown clayey sand zones were encountered. In Cluster C, Stallings sherds were densely encountered in Levels 3 through 5 (20-50 cm bs), but continued into Level 9 (80-90 cm bs). Based on soil data and the recovery of Late Archaic ceramics, it appears the Stallings component occurs mainly within this yellowish-brown sandy matrix with some mixing occurring in upper soil zones.

## Distribution of Shell Across the Examined Area

Table 11 shows the distribution of shell in each excavated unit by level. Based upon these data, Levels 1 and 2 contained the highest concentrations of shell, and appear to coincide with the site's Woodland occupations, based on occurrence and frequency of ceramic types from those levels. Across the site, shell frequency begins to drop dramatically below 20 cm, with the exception of Level 3, Unit 408. This unit contained a Woodland shell midden, and the midden dipped in Level 3 (20-30 cm bs). The presence of shell primarily in the upper 20 cm of the site with higher frequencies of Woodland and Mississippian ceramics *and* the association of Stallings ceramics primary with deposits greater than 20 cm bs demonstrate that the Ceramic Late Archaic occupation of the Tree Runner site lacks shell deposits.

Table 11. Shell Recovered (in kg) by Level.

	Total (kg)	68.25	82.75	36.0	7.5	0.25	trace	194.75
С	408	1.25	12.5	26.5	0.9	0.25	trace	46.5
С	406	trace	0	0.5	0	0	0	0.5
С	404	0.5	1.75	1.0	trace	0	0	3.25
С	403	0.25	0.5	trace	trace	trace	0	0.75
С	402	0	0	trace	trace	0	0	trace
В	415	trace	0.5	trace	trace	0	0	0.5
В	414	trace	1.5	0.75	0	0	0	2.25
В	413	0.75	2.25	0	0	0	0	3.0
В	412	0	3.0	0.5	trace	trace	0	3.5
В	411	4.0	16.75	0.5	0	0	trace	21.25
В	410	40.5	16.25	trace	trace	0	0	56.75
В	409	3.0	8.25	2.5	trace	0	0	13.75
В	407	5.0	2.0	0	1.0	0	0	8.0
В	405	13.0	17.5	3.75	0.5	0	0	34.75
A	420	0	0	0	0	0	0	0
A	419	0	trace	0	0	0	0	trace
A	418	trace	trace	trace	0	0	0	trace
A	417	trace	0	0	0	0	0	trace
A	416	trace	trace	trace	0	0	0	trace
	401	trace	0	0	0	0	0	trace
Block	Unit	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Total

The units exhibiting the highest frequencies of shell are Units 405, 408, 410, and 411, generally located in the southwest portion of the examined area. Block A had only trace amounts of shell. Units 405, 410, and 411, all located within Block B, had some of the highest amounts shell. These three units combine to compose part of the Woodland shell midden that was partially exposed (see Figure 12). Unit 408, located in Cluster C, had the second highest level of shell.

# Overview of Features

Excavations encountered, exposed, and documented 10 cultural features at the Tree Runner site. Table 12 lists each feature and provides the basic attributes of each. Features 601/603, 605, 606, and 609 appear to be related to the Woodland period occupation of the site. Only Feature 608 is associated with the site's limited Mississippian period occupation. Two features (602 and 612) are associated with the site's Ceramic Late Archaic component. Both are Stallings sherd clusters.

Table. 12. List of Cultural Features Identified at 38BU1800.

Feature Number	<u>Dimensions</u>	Interpreted Function
601/603	63 x 13 cm	shell filled lens, possibly edge of pit (no stain visible)
602	20 x 17 cm	Stallings sherd cluster
604	18 x 18 cm	small pit/post
605	10 x 18 cm	razor clam concentration, Woodland (?)
606	30 x 100 cm	Woodland shell filled pit
607	100 x 80 cm	opossum - historic deposition
608	28 x 20 cm	periwinkle concentration
609	10 x 23 cm	shell filled post/pit
612	25 x 17 cm	Stallings sherd cluster

# Chapter V. Artifact Analyses

Identification and analyses of a site's artifact assemblage and its contributions to our understanding of a regional sequence is a primary goal of our laboratory's detailed artifact analysis. In achieving this goal, we present an exhaustive group of attributes for each artifact type and compare them with other assemblages from the immediate vicinity and other areas of coastal South Carolina. Our research is based on a wide range of published sources along with reviews of data from regional archaeological reports (see Table 1).

This chapter first notes the general attributes of the entire artifact assemblage, followed by the detailed ceramic analyses. The chapter concludes with analysis of the lithic artifacts and archaeobotanical remains recovered from the site. Within each section are comparisons with other temporally-related regional sites. Interpretation of these data are presented in Chapter 6.

# **Artifact Assemblage**

During data recovery field excavations, archaeologists recovered 1,218 artifacts from the Tree Runner site (38BU1800). Included in this assemblage are 1,212 Native American-related items, 3 historic items, and 3 naturally occurring items. The historic artifacts are one olive green bottle glass fragment, one undecorated whiteware sherd, and one shotgun shell. We also recovered 3.5 grams of brick fragments. All of the historic artifacts are considered intrusional and represent less than 1 percent of the site's assemblage. Three petrified wood fragments were also recovered and are considered native to the area. None are modified and are therefore not true artifacts. A detailed artifact catalog appears in Appendix A.

The Pre-Contact artifact assemblage from 38BU1800 contains 1,158 ceramic items (96%) and 54 lithic fragments (4%). Also attributed to the Pre-Contact component of the site are faunal and botanical remains. Table 13 presents a list of these items with weights.

# **Ceramic Analysis Methods**

Table 13. List of Weighed Botanical and Faunal Artifacts.

Our ceramic analysis
proceeded in two stages. We designed
the preliminary or basic analysis to
provide provenience and stratigraphic
data on the entire collection, to
identify various types of ceramics, and
to facilitate selection of a
representative sample for secondary
analysis. Detailed or secondary
analysis is designed to determine
ceramic continuity and change
between components (Espenshade and
Brockington 1989). The purpose of
, ,
this detailed analysis is to document
technological, functional, and stylistic
variability and continuity within the
1.1 7, 11 0

<u>Artifact</u>	Weight
Botanical Remains	
charcoal	13.8 g
nut shell	0.4 g
Faunal Remains	
bone	259.8 g
Shell	
land snail	0.4 g
clam	25.2 g
oyster	1727.5 g
periwinkle	103.3 g
razor clam	175.8 g
scallop	7.8 g
whelk	129.6 g
residual shell	609.8 g

assemblage. It allows for comparison of these factors with other assemblages, and for replication and comparison by other researchers.

During the preliminary cataloging of artifacts, technicians inventoried ceramics more than 2 cm in diameter by surface decoration and temper. Sherds less than 2 cm in diameter are routinely cataloged as residual sherds. Technicians described surface decoration using recognized terms (i.e., cord marked, simple stamped, plain). They identified sherds as body or rim. Occasionally, when

easily identifiable as such, a neck or base sherd is noted. On a fresh break, they determined temper by comparison with a set of standard clay briquets with sand of known sizes added. As suggested by Shepard (1956:118), these aplastic size classes are based on the Wentworth geological scale (Table 14). When the temper measurements are on the line between one size class

Table 14. Wentworth's Geological Scale.

<u>Name</u>	Grade Limits
	(Diam. in mm.)
granular	4 - 2
very coarse	2 - 1
coarse	
fine/medium	less than $\frac{1}{2}$

and the next, our laboratory uses the larger of the two classes (i.e., if the temper measurement is 2, granular is used) Finally, all sherds except residuals are labeled with site, provenience, and catalog numbers.

Detailed ceramic analysis examines sherds after grouping as vessels. This grouping is by minimum vessel (MNV) based on identification of stylistic attributes and temper. Our ceramicist makes an attempt to select a minimum number of ceramic vessels that is representative of all types of surface decoration, temper, and vessel form.

The analyst then examines the vessels for the following decorative and technological attributes:

1. exterior and interior surface treatment

2. aplastic content

3. paste texture

4. core configuration and carbon retention

5. vessel form

6. rim form and production

7. rim diameter and thickness

8. coil breaks

9. fire clouding and sooting

Technicians record each vessel on a form by vessel number. Information such as the provenience and catalog number of each sherd and the number of sherds assigned to the vessel is noted.

The analyst notes surface treatment both exterior and interior, along with the typological designation. The technician records interior surface treatment as rough, smoothed, well smoothed, burnished or scraped. Rough is characterized by gross irregularities of aplastics and construction noted on the interior surface of the sherd. Smoothed suggests some effort by the potter to even the interior of the vessel. Well smoothed denotes a hard packed, smooth interior. Burnished is characterized by a smooth, glossy surface, often with tooling marks evident. Scraped is defined by the marks left by a shell or other tool used to smooth or even the interior of the vessel.

Using a 60X binocular microscope on a fresh break, the analyst examines the aplastic (temper) content, both major and minor. Aplastic type, size, and density are noted and may reflect the source of the aplastics (intentional temper verses natural inclusions). Aplastic type, size and density may also be related to function, to the plasticity and characteristics of the clay, and to cultural preferences. Aplastic shape is recorded as round, subround, subangular, or angular. The technician determines paste density based on the number of aplastics visible microscopically at 60X

and records it as dense (compact), sugary (grainy), or porous (open). Paste density is indicative of the clay resource, the firing and use history of the vessel, and the nature of the aplastics.

The analyst also notes carbon core retention in the cross section of a fresh break. Analysis includes data on the relative locations of the paste colors along with the percentage of dark core retention. This carbon core is often dark brown, black, or dark gray. These colors indicate the degree of oxidation that occurred during firing. However, core retention can be affected by elements in the clay source, aplastic content, post-firing usage of the vessel, and thickness. Thick vessels and bases may show incomplete oxidation due to low temperature or insufficient oxygen in the firing atmosphere.

On sufficiently large sherds, attributes of vessel form may be detected. The analyst notes shoulder and rim forms along with the presence or absence of pods. When possible, the technician draws rim profiles using a form-a-gauge and metric calipers. Also, he measures rim thickness 3 cm below the rim edge and records rim shape and production steps.

Finally, the analyst logs vessel production attributes. These include the absence or presence of coil breaks, fire clouding, and sooting. Coil breaks reflect the technology utilized in vessel construction and the thoroughness of coil compaction. Coil breaks are recognized by latitudinal breaks paralleling the rim, with the break often exhibiting a regular concave or convex surface. Also recorded are any incidents of fire clouding and sooting which often result from the firing method or direct heat cooking. Presence of fire clouding or sooting may also help determine usage patterns among vessel types.

## **Ceramic Type Descriptions**

Type or series names were applied utilizing a variety of sources (see Table 1). These names are assigned based on attributes of surface decoration and temper. Untyped ceramics are those that cannot be attributed to any particular type or series.

## Late Archaic/Early Woodland - Stallings and Thom's Creek

Based on recent research and a compilation of data from numerous sites, Sassaman (1993a:20) attributes both Stallings fiber tempered ceramics and Thom's Creek sand tempered wares

to the Ceramic Late Archaic period with production of Stallings I ceramics beginning in the Middle Late Archaic. Further data suggest that production of Thom's Creek sand tempered wares continued into the Early Woodland period (Sassaman et al. 1990:180).

Stallings ceramics are described as having fiber vesicles throughout the paste, typically visible on both the exterior and interior vessel surface. Along with undecorated or plain types, decorations include incising, drag and jab punctate, separate punctate, and simple stamped (Anderson 1996).

Thom's Creek is a sand tempered ware of uniform thickness, and hard, compact paste. Sand inclusions are generally subround sand smaller than 1 mm in size. On plain sherds, evidence of shell scraping is often evident. Decorations include drag and jab punctate, separate punctate, and simple stamped (Anderson 1996). While Thom's Creek ceramics often co-occur with Stallings ceramics, none are identified at 38BU1800.

# Early Woodland - Refuge

Refuge is an Early Woodland ceramic series, named by Antonio Waring after the Refuge site just north of Savannah on the Savannah River. This pottery is sand or grit tempered and can be found plain or decorated with punctating, simple stamping, or dentate stamping (Waring 1968a). The simple stamped variety exhibits carelessly applied U- or V-shaped longitudinal grooves, and the impressions are frequently irregularly spaced and haphazardly applied. Punctate varieties include Refuge Allendale Punctate with "closely spaced, randomly oriented punctations that must have been made by a composite instrument rather than one impression at a time" (Stoltman 1974:276).

## Early to Late Woodland - Deptford

Deptford is an Early to Late Woodland ceramic series with coarse to very coarse sand tempering. During its later manifestations it may be related to the Santee and McClellanville series of mid-coastal South Carolina and possibly to the Cape Fear or Deep Creek series common on the southern North Carolina coast. Technologically all of these ceramics are very similar, and fall into the Middle Woodland to Late Woodland time frame. In the Early Woodland period, Deptford wares are linear check stamped with coarse to very coarse sand tempering. Bowl forms with plain rims are common. For this study, we use Deptford to refer to check stamped, cord marked, and fabric

impressed ceramics with coarse, heavy sand tempering. These ceramics are generally Middle Woodland, but our research indicates the cord marked and fabric impressed varieties continue into the Late Woodland period.

# Middle Woodland - Wilmington

Wilmington ceramics are characterized by large, granular size lumps of fired clay or broken sherds used as a tempering agent. These materials are called *grog*. Wilmington ceramics are most often cord marked or fabric impressed although brushed, check stamped, simple stamped, or plain wares also occur in various locales. Interior surfaces are often lumpy due to the large tempering fragments. In the Beaufort County area, Wilmington ceramics are most often cord marked or fabric impressed, conical bowls. These Wilmington ceramics date to the Middle Woodland period (Caldwell and Waring 1939a, 1939b).

# Late Woodland/Mississippian - St. Catherines

Named after St. Catherines Island and recognized by Joseph Caldwell during the late 1960s, these grog or clay tempered ceramics are generally cord marked, net impressed, plain, and burnished plain. The type was further refined by DePratter (1991). The grog tempering is generally smaller than that of the Wilmington type; interiors are smoothed. Previous analysis identified several vessel forms including hemispherical bowls, cylindrical jars, and cazuela bowls. The cazuela bowl form occurs most often in the plain and burnished varieties.

## Mississippian

Mississippian ceramics occur from generally 900 AD to 1600 AD or the beginning of the Protohistoric period. Several types overlap in the Charleston area including Pee Dee, Savannah, and Irene as well as some generally Late Woodland, St. Catherines varieties. Without distinctive rim decoration and identifiable complicated stamped motifs it is usually impossible to distinguish the different types. In our analysis, these ceramics are identified only as Mississippian.

## Middle Mississippian - Savannah

Named for the city and river of the same name by Caldwell and Waring (1939a 1930b), Savannah ceramics may be burnished plain, check stamped, complicated stamped, and fine cord marked. Usually containing coarse to very coarse sand temper, vessel forms include jars, bowls, and carinated bowls. Complicated stamped patterns are generally curvilinear with the Filfot cross being common. Many of the patterns contain rectilinear elements. Rims are not decorated and are generally flaring on bowls as well as jars. Exceptions include shallow bowls and carinated bowls.

# Late Mississippian - Irene

Named after the Irene site in Georgia by DePratter (1991), Irene has been generally applied only to the Georgia coast. Vessels are coarse to very coarse sand tempered and may be burnished, plain, complicated stamped, diamond check stamped, complicated stamped, and incised. Rims are decorated with applied strips which may be either pinched or punctated. Other rim decorations include rosettes or punctated nodes. Vessel forms include a wide variety from simple bowls to restricted neck jars to carinated bowls. Small beaker forms are also present in some assemblages (Williams and Thompson 1999:88). The diamond check stamped variety is controversial and is most likely a transitional Irene/Altamaha ceramic instead.

# Late Mississippian - Irene, Shell Crescent Variant

The Shell Crescent site, 38BU1791 (Mozingo et al. 2004), is the type site for these ceramics and is located approximately 0.65 km from 38BU1800. Mozingo et al.'s identification of Irene, Shell Crescent variant, ceramics is based on several distinct characteristics of that site's ceramic assemblage. For example, the assemblage contains a high percentage of the diamond check stamped vessels, for which a calibrated radiocarbon date (2 Sigma, 95% probability) of AD 1290 to 1410 (Beta Analytic 177780) was obtained from vessel sooting. Background research indicated that a diamond-shaped check stamped pattern also had been recorded by Caldwell in 1969 from a site on the upper Georgia coast (Williams and Thompson 1999:57). Additionally, DePratter (South and DePratter 1996:51-53) discusses and shows diamond check stamped sherds from the Santa Elena site; however, he attributes these to the late Irene/Altamaha types (Mozingo et al. 2004). Other distinguishing characteristics of the diamond check stamped ceramics include a high percentage of slipped (53%) and burnished interiors (11%) interiors (Mozingo et al. 2004).

The Shell Crescent assemblage also contains cob impressed ceramics where the vessel body is primarily stamped with intact corn cobs but also contains stamping with cobs from which the kernels have been removed. Interior slipping is also common on these ceramics. The variant's plain vessels are primarily burnished restricted opening or carinated bowls. The Shell Crescent

assemblage also contains complicated stamped vessels often with degraded versions of the Filfot cross. Interior surfaces included slipping with the largest percentage being burnished. Several of these vessels also have applied or appliqued and punctated nodes. Red filmed vessels occur in very low percentages. Finally, the variant includes a new decorative type labeled textured. Textured ceramics are those that are deliberately overstamped and/or impressed to create a rough exterior texture. This texture makes the vessel paste very compact and creates an extremely *grippable* surface. It is most often impossible to identify the particular paddles or techniques used for creating a textured vessel. When impressions or stamping can be identified, the textured surface is created by a combination of two or more techniques. In addition to severe overstamping, the surface may also be smoothed (Mozingo et al. 2004).

# **Preliminary Ceramic Analysis**

Excavations at the Tree Runner site (38BU1800) recovered 1,158 ceramic sherds and objects. Of these, 636 (55%) are cataloged as residual sherds and are less than 2 cm in diameter. Technicians identified only one ceramic object, a fragment of fired clay or daub that was not part of a vessel. The remaining 521 ceramics include both rim and body sherds from a wide variety of Pre-Contact vessels. Table 15 provides basic surface decoration and temper types for these sherds.

The earliest ceramic type, Stallings, is represented by 198 sherds (38%) of those examined during the detailed ceramic analysis. These fiber tempered sherds include plain/burnished sherds (66%), punctated varieties (20%), slipped sherds (5%), incised sherds (6%), and eroded sherds (3%). Grog tempering accounts for 94 sherds (18%). The remaining 229 sherds are sand tempered (44%).

Our analysis attempted to apply ceramic type names to the 521 rim and body sherds. Twenty-six percent (n = 134) of the sherds could not be accurately typed. Stallings ceramics make up the largest component at 38 percent. Wilmington ceramics account for 13 percent (n = 69), while Deptford ceramics account for 11 percent (n = 60). Smaller numbers of sherds represent the Refuge component (n = 37, 7%) and the Savannah component (n = 15, 3%), along with four sherds each of the Mississippian and Irene, Shell Crescent Variant, components (1% each). Each of these components is also represented by vessels within our minimum vessel analysis.

Table 15. Sherd Counts by Decoration and Temper.

Description	<u>Count</u>
plain sherd, fine/medium sand temper	6
plain sherd, coarse sand temper	58
plain sherd, very coarse sand temper	2
plain sherd, grog temper	1
plain sherd, fiber temper	129
burnished sherd, very coarse sand temper	1
burnished sherd, fiber temper	1
check stamped sherd, fine/medium sand temper	7
check stamped sherd, coarse sand temper	6
check stamped sherd, very coarse sand temper	1
curvilinear complicated stamped sherd, fine/medium sand temper	1
curvilinear complicated stamped sherd, coarse sand temper	3
cord marked sherd, fine/medium sand temper	14
cord marked sherd, fine/medium temper	8
cord marked sherd, coarse sand temper	9
cord marked sherd, very coarse sand temper	19
cord marked sherd, grog temper	77
fabric impressed sherd, fine/medium sand temper	1
fabric impressed sherd, coarse sand temper	2
fabric impressed sherd, grog temper	7
simple stamped sherd, fine/medium sand temper	5
simple stamped sherd, coarse sand temper	27
punctate sherd, fine/medium sand temper	1
punctate sherd, coarse sand temper	1
punctate sherd, fiber temper	39
scraped sherd, coarse sand temper	1
scraped sherd, grog temper	1
slipped sherd, fiber temper	11
sherd with unidentifiable decoration, fine/medium sand temper	10
sherd with unidentifiable decoration, coarse sand temper	15
sherd with unidentifiable decoration, very coarse sand temper	7
sherd with unidentifiable decoration, grog temper	4
eroded sherd, fine/medium sand temper	3
eroded sherd, coarse sand temper	4
eroded sherd, very coarse sand temper	5
eroded sherd, grog temper	4
eroded sherd, fiber temper	6
unidentified stamped sherd, coarse sand temper	2
random incised sherd, fine/medium sand temper	3
random incised sherd, coarse sand temper	3
random incised sherd, fiber temper	12
cob impressed sherd, fine/medium sand temper	2
cob impressed sherd, coarse sand temper	1
roughened sherd, fine/medium sand temper	1

## **Detailed Ceramic Analysis**

Detailed ceramic analysis for the Tree Runner site began with minimum vessel identification. Our research identified 53 vessels from seven different ceramic types or series. Detailed information about each vessel is provided in Appendix B. Table 16 provides counts and percentages by ceramic type. The following discussion is in chronological order.

Table 16. Counts and Percentages of Ceramic Vessels.

Type Stallings Refuge Deptford Wilmington Savannah Mississippian	Count 16 9 6 10 3 5	Percentage 30 % 17 % 11 % 19 % 6 % 9 %
Irene, Shell Crescent	4	8 %
TOTAL	53	100 %

# Ceramic Late Archaic - Stallings

Based on rim style and diameter along with surface decorations, our analysis identified 16 Stallings vessels. These include plain vessels (n = 9) as well as those with separate punctates (n = 5) or incised decorations (n = 2). Table 17 provides basic data for each vessel. Figures 25 to 27 provide photographs of representative samples of the Stallings vessels.

General attributes, such as firing, sooting, core retention, and production techniques, often can illustrate differences, whether cultural or temporal, between one collection and another. At the Tree Runner site, plain (includes burnished and slipped) vessels account for 56 percent of the Stallings vessels. Thirty-one percent (31%) are separate punctated, with only 13 percent being incised. All are slab produced simple bowl forms. No coil breaks are noted, and coil mends could not be seen in sherd profiles. Fiber temper is listed as heavy for seven vessels and light in the other nine.

None of the vessels are sooted; a review of all Stallings sherds revealed a total lack of sooting within this collection. Fire clouding is present on seven vessels; of these 71 percent exhibit fire clouding on the exterior of the sherd. Dark core retention, often an indicator of firing practices and direct fire use, is present in all but one vessel (MNV 27). However, five vessels have low dark core retention, six have moderate dark core retention, and four have high dark core retention. These

Table 17. Stallings Vessel Attributes.

Vessel #	<u>Decoration</u>	Prov/Cat. #	Interior Surface Treatment	<u>Rim</u> Shape	Thick- ness	<u>Rim</u> Diameter	Vessel Form
27	Plain	402.3:1	well smoothed	round	10.18mm	32 cm	simple bowl
28	Separate Punctate	612.1:1	smoothed	round	8.4mm	40 cm	simple bowl
29	Random Incised	405.4:1	well smoothed	flat	7.6mm	48 cm	simple bowl
30	Plain	417.3:1	smoothed	flat	9.8mm	24 cm	simple bowl
31	Burnished	607.1:1	well smoothed	round	8.3mm	18 cm	simple bowl
32	Separate Punctate	406.5:1	smoothed flat 10.05mm			simple bowl	
33	Plain	402.4:1	well smoothed	round	10.11mm	18 cm	simple bowl
34	Plain	403.7:2	smoothed	round	9.4mm		simple bowl
35	Separate Punctate	413.4:1	well smoothed				
36	Plain	408.4:1	smoothed	round	10.32mm	15 cm	simple bowl
37	Plain	45.1:1	well smoothed	round	10.38mm		simple bowl
38	Plain	415.1:1	well smoothed	round			
39	Separate Punctate	39.1:1	smoothed	round			
40	Separate Punctate	403.3:1	smoothed				
41	Slipped	416.5:1	slipped				
48	Random Incised	604.1:1	smoothed	square	9.00mm	28 cm	simple bowl

findings indicate these vessels were not used for direct fire cooking and were generally fired in a reduced atmosphere.

Analysis also examined surface decoration and vessel form. The nine plain Stallings vessels include one with a burnished surface and one with a slipped surface. Slipping of the interior and exterior surfaces on a Stallings vessel allows for a smoother surface with few if any fiber cavities or vesicles. This collection includes small bowls (15 cm in diameter) to large bowls (32 cm in diameter). Thickness ranges from 8.3 mm to 10.38 mm with an average of 1.11 mm.

Five separate punctate vessels are defined. Each has small separate punctates, either round or dash shaped. These punctates appear in groups on the exterior body of the vessel, usually near the rim. The small round punctates were mostly likely applied using a sharpened stick. It may be that the dashes are also applied with the same tool.

Analysis identified only two incised vessels. Both are incised with what appear to be criss-crossing random marks made by a sharp object. Incising appears on the exterior only of both vessels, near the rim.



Figure 25. Stallings Plain vessels. Top row: MNVs 30 and 31. Bottom row: MNV 27.



Figure 26. Stallings Incised vessels. Top row: MNV 48. Bottom row: MNV 29.



Figure 27. Stallings Separate Punctate vessels. Top row: MNVs 32 and 40. Bottom row: MNV 28.

Comparison of the Tree Runner site's Stallings ceramics to ceramic assemblages at other Ceramic Late Archaic sites is presented in Chapter 6. These comparisons will also include other artifact groups such as lithic tools, shell tools, and faunal assemblages to more fully explore the dynamics of Ceramic Late Archaic sites.

## Early Woodland - Refuge

Our analysis identified nine Refuge vessels. These include five simple stamped (56%), two plain (22%), and one each random incised and scraped (11% each). This collection is sand tempered, with temper sizes ranging from fine/medium (n = 3) to coarse (n = 5) to very coarse (n = 1). Coil breaks are evident on seven of the nine vessels indicating coil construction for the assemblage. There is no sooting; however four vessels show evidence of fire clouding. There is no dark core retention in six of the Refuge vessels with the other three having low to moderate dark core retention. Attributes of specific vessels are shown in Table 18 while Figures 28 and 29 provide illustrations of these vessels.

Table 18. Refuge Vessel Attributes.

Vessel #	<b>Decoration</b>	Prov/Cat. #	Interior Surface Treatment	<u>Rim</u> Shape	Thick- ness	Rim Diameter	Vessel Form
13	Random Incised	405.3:5	smoothed				
24	Simple Stamped	410.3:1	well smoothed	round	0.88 mm	28 cm	jar
25	Simple Stamped	401.3:3	well smoothed	flat	0.83 mm	36 cm	jar
26	Simple Stamped	419.3:4	well smoothed	round	0.93 mm	20 cm	bowl
43	Plain	419.2:1	well smoothed	round	1.09 mm	18 cm	bowl
44	Plain	419.3:1	smoothed	round	1.0 mm	22 cm	bowl
45	Simple Stamped	5.1:5	smoothed	flat	1.03 mm	34 cm	bowl
46	Simple Stamped	5.1:5	rough	flat	1.15 mm	56 cm	bowl
49	Scraped	418.3:2	smoothed				

This Refuge assemblage includes five bowl forms and two jars. Diameters range from 18 cm to 56 cm, with thickness from 0.83 mm to 1.15 mm. Average thickness is 0.99 mm.

Comparison with Other Refuge Components. From two additional Pre-Contact site data recovery projects in the immediate vicinity, only one Refuge component has been identified. At



Figure 28. Refuge Simple Stamped vessels. Top: MNV 45. Bottom: MNV 46.



**Figure 29**. Additional Refuge vessels. Top row: MNV 26, simple stamped and MNV 13, random incised. Middle: MNV 24, simple stamped. Bottom: MNV 25, simple stamped.

38BU1791 (Mozingo et al. 2004:140-142), analysis identified two Refuge Zone Punctate vessels. Both are identified based on body sherds; therefore, form, diameter, and thickness could not be determined. Therefore few comparisons can be made between these two Refuge assemblages. However, the differences in surface decoration suggest either temporal or cultural discontinuity. Analysis at 9GN203, located on Georgia's St. Simons Island, identified three Refuge Simple Stamped vessels. Two are listed as bowls; one with a diameter of 38 cm. Average thickness is 8 mm.

# Early to Middle Woodland - Deptford

Six Deptford ceramic vessels identified from the Tree Runner site can be attributed to the Early and Middle Woodland periods. Vessels 22 and 23, both linear check stamped, can be attributed to an Early Woodland occupation at the site and may have co-occurred with the previously discussed Refuge component. Deptford Cord Marked and Fabric Impressed varieties are more often attributed to the Middle Woodland period. Table 19 provides the general attributes of these vessels. Each vessel is sand tempered. The collection includes three jar forms.

Table 19. Deptford Vessel Attributes.

Vessel #	<u>Decoration</u>	Prov/Cat. #	Interior Surface Treatment	<u>Rim</u> Shape	Thick- ness	Inferred Vessel Form
9	Cord Marked	24.1:1	smoothed	round	0.86 mm	jar
11	Cord Marked	406.3:1	well smoothed	round	0.95 mm	jar
17	Fabric Impressed	403.2:9	well smoothed			
19	Fabric Impressed	18.1:4	well smoothed	round		jar
22	Linear Check Stamped	405.3:4	well smoothed			
23	Linear Check Stamped	418.2:1	well smoothed			

At the Shell Crescent site, 38BU1791, four Early Woodland, Deptford Linear Check Stamped vessels were recovered (Mozingo et al. 2004:105-113). Like the two Deptford Linear Check Stamped vessels identified at 38BU1800, none contained rim sherds, and vessel form could not be determined.

The Shell Crescent site's Deptford component (Mozingo et al. 2004:105-113) also contained 21 Deptford Cord Marked vessels. The majority of these are Z twist impressed (86%) while the other three are S twist. The Tree Runner (38BU1800) site's two cord marked vessels are also Z twist.

Both of the Tree Runner site's Deptford Cord Marked vessels are jars and are fairly thick walled, with thickness of 0.86 and 0.95 mm. Of the five Deptford Cord Marked vessels recorded at the Shell Crescent site, two have shell scraped interiors with thicknesses of 4.1 and 7.3 mm. The others have thicker bodies ranging form 9.0 to 10.2 mm (Mozingo et al. 2004:105-113).

## Middle Woodland - Wilmington

Of the 10 Wilmington vessels identified during analysis, seven are cord marked. The remaining three include two fabric impressed vessels and one plain vessel. Table 20 presents additional attributes for these Wilmington ceramics, while Figure 30 illustrates some of the Wilmington vessels.

Table 20. Wilmington Vessel Attributes.

Vessel #	<b>Decoration</b>	<u>Prov/Cat.</u> <u>#</u>	<u>Interior</u> <u>Surface</u>	Rim Shape	Thick- ness	Inferred Vessel Form	<u>Rim</u> <u>Diameter</u>
1	Cord marked	416.3:4	smoothed			conical bowl	
2	Cord marked	609.201:14	smoothed	round	0.87 mm	conical bowl	44 cm
3	Cord marked	404.3:3	smoothed	round	0.81 mm	conical bowl	52 cm
4	Cord marked	9.1:4	smoothed	round	0.74 mm	bowl	28 cm
6	Cord marked	9.1:2	rough				
8	Cord marked	9.1:3	well smoothed				
10	Cord marked	9.1:4	smoothed	round		bowl	20 cm
14	Fabric impressed	407.2:7	smoothed				
15	Fabric impressed	404.3:7	smoothed				
42	Plain	5.1:3	well smoothed	round	0.68 mm	bowl	20 cm

This Wilmington assemblage includes six with recognizable vessel forms. All are bowls with three designated as conical bowls. Vessel diameter ranges from 20 cm to 52 cm. Vessel thickness ranges from 0.68 mm to 0.87 mm, with an average thickness of 0.78 mm.

All six of the cord marked vessels appear to have the "Z" type twist in the cordage used during decoration. Cord thickness ranges from 1 mm to 2.6 mm, while cord spacing ranges from 0.6 mm to 4 mm. Analysis noted that the two Deptford Cord Marked vessels also have Z twist cordage with thickness ranging from 1 to 1.5 mm and spacing from 2 to 2.1 mm.

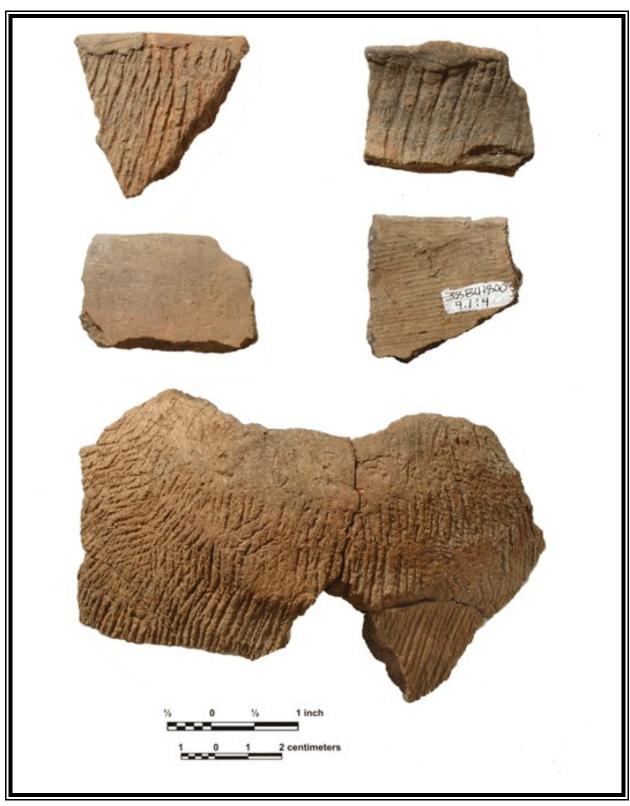


Figure 30. Wilmington vessels. Top row: MNVs 2 and 3. Middle row: MNVs 42 and 4. Bottom: MNV 1.

Close examination of the Wilmington sherds from the Tree Runner site revealed no sooting. We did not recover a closed context Wilmington feature; therefore, this site did not provide additional radiocarbon dates that might address this question.

Comparisons. At 38BU1791 (Mozingo et al. 2004:105), sooting from a Wilmington vessel (AD 370 to 540; Beta Analytic 176587) and a Wilmington Cord Marked sherd (AD 330 to 460; Beta Analytic 175847) provided dates placing that site's Wilmington ceramics in the early Middle Woodland period rather than the Late Woodland period as proposed by Caldwell (1952) and DePratter (1991). The Shell Crescent site's Wilmington component consists of cord marked, fabric impressed, plain, and simple stamped vessels (Mozingo et al. 2004:105).

At four Wilmington sites in Beaufort County, Kennedy and Espenshade (1992) placed Wilmington ceramics in the Late Woodland period based on five radio carbon dates from oyster shell. Their report does have one early date (AD  $516 \pm 80$ ) from 38BU372 that would place at least a portion of their Wilmington component more in line with the Shell Crescent assemblage (Mozingo et al. 2004:105). Cantley and Cable (2002:234) obtained thermoluminescence dates from two Wilmington sherds. Their date for the Wilmington Cord Marked sherd is AD 291  $\pm$  191 or AD 200 to 482. Cantley and Cable (2002:234) wrote "the argument that some Wilmington series sherds are as old or older than some Deptford sherds is fairly well supported by these data."

# Mississippian - Savannah, Mississippian, and Irene, Shell Crescent Variant

The final three ceramic types are all related to the small Mississippian component (23%) at 38BU1800. Included are twelve (12) vessels; three are Savannah, four are Irene, Shell Crescent Variant, and five are Mississippian. Table 21 provides the general attributes of these vessels. Figure 31 illustrates some of these vessels.

The three Savannah vessels are all fine cord marked. Two have burnished interiors. Vessel 12 has a round rim edge. Due to the small size of the sherds, vessel form could not be determined for any of these vessels.

Three of the Mississippian vessels are complicated stamped. These three have well smoothed interiors. The other two Mississippian vessels include one highly burnished and one fabric impressed. Both of these have burnished interiors. The remaining two Mississippian vessels include one fabric impressed and one burnished. The fabric impressing on Vessel 16 indicates stamping

Table 21. Mississippian Vessel Attributes.

<u>Type</u>	Vessel #	<u>Decoration</u>	Prov/Cat. #	Interior Surface Treatment	<u>Rim</u> Shape
Savannah	12	fine cord marked	407.2:2	burnished	round
Savannah	7	fine cord marked	417.3:4	burnished	
Savannah	5	fine cord marked	404.3:1	well smoothed	
Mississippian	52	curvilinear complicated stamped	402.2:2	well smoothed	
Mississippian	51	curvilinear complicated stamped	403.2:2	well smoothed	
Mississippian	50	complicated stamped	10.1:1	well smoothed	
Mississippian	47	burnished	418.2:5	burnished	
Mississippian	16	fabric impressed	416.2:3	burnished	
Irene SCV	53	cob impressed	11.1:2	burnished	
Irene SCV	21	cob impressed	407.2:1	slipped	
Irene SCV	20	diamond check stamped	6.1:3	well smoothed	round
Irene SCV	18	cob impressed	13.1:2	well smoothed	

with a very tightly woven fabric. The interior of this vessel is burnished. Form could not be determined for any of these vessels.

Since their identification by Mozingo et al. (2004), Irene, Shell Crescent Variant, ceramics have been identified at several additional Palmetto Bluff sites. At the Tree Runner site, our analysis attributes four vessels to this variant. Three are cob impressed while the fourth is diamond check stamped. This component is small, but is definably based on several attributes. Diamond check stamping occurs along with cob impressing. Cob impressions are often made by stamping with an intact corn cob (intact kernels), and slipped interiors are common. In this collection, Cob Impressed Vessels 21 and 53 were stamped with intact cobs. Additionally, Vessel 21 has a slipped interior.

It is likely that Vessels 51, 52, and 47 also belong to this component. However, the lack of rim sherds and vessel form data prevents our definitively assigning these vessels to the Shell Crescent Variant component. Additionally, none of these vessels were identified from feature context, and their small number indicates a very limited occupation of the site during this time frame.

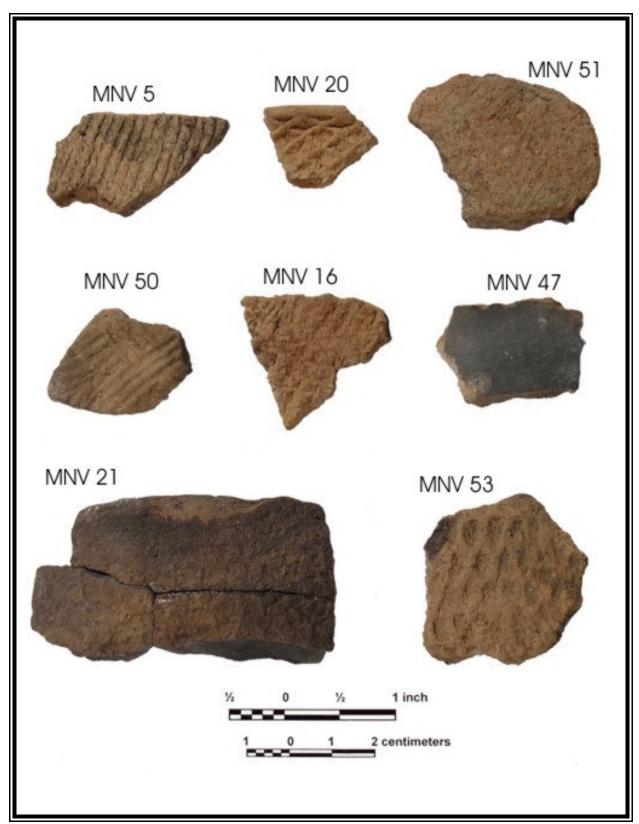


Figure 31. Mississippian vessels.

## **Lithic Analysis**

Technicians recovered 54 lithic artifacts from shovel tests, 50-by-50-cm tests, and excavation units at 38BU1800. During analysis, technicians classified the artifacts by material and technological process of production. The artifacts fell into three raw material types; Coastal Plain chert, banded rhyolite, and translucent quartz. All are available in the Southeast and were culturally transported to the site's coastal plain locale (Goad 1979).

Toolmakers worked these raw materials by hard or soft hammer percussion and pressure flaking (Crabtree 1982). Each of these reduction techniques produces distinctive debitage that can show what kind of lithic activities and production techniques the Pre-Contact toolmakers undertook at the site (Andrefsky 1998). The site produced one projectile point fragment, one biface fragment, three cores, and 49 pieces of debitage.

The projectile point fragment, a mid-section from Provenience 402.4:6 and a biface fragment (Provenience 411.2:11) are both made of heat treated Coastal Plain chert and could be parts of the same stone tool. The pieces are small with no characteristics to define them typologically or to definitively join the two fragments as the same tool.

The three Coastal Plain chert cores all had some cortex remaining. Examination of the surface shows all three to be round cobbles, having smoothed surfaces probably from a river or stream. The toolmakers probably collected these cobbles from waterways within the Coastal Plain.

Technicians sorted the chipped stone debitage by form attributes using the following basic definitions. Flakes are chipped stone debris having a discernable striking platform and bulb of percussion. Flake fragments do not have a striking platform or bulb of percussion, but do have a dorsal and ventral side showing it to have been part of a flake. Shatter is production debitage without flake form, typically angular and blockish with few traits to show how it was produced. Thinning flakes are small, thin and generally less than 20 mm in width. Pressure flaking creates thinning flakes during the final reduction stage of tool manufacture or resharpening (Crabtree 1982).

The 49 pieces of debitage from 38BU1800 consist of 13 flakes, 7 flake fragments, 21 thinning flakes, and 8 pieces of shatter. Unfortunately this small lithic data set makes statistical analysis uninformative and interpretation impossible. Analysis cannot determine activities to any

stage of tool making. Without a typeable projectile point, the lithic material cannot be independently dated to a specific time range.

#### **Archaeobotanical Remains**

The goal of archaeobotanical studies is to examine the botanical assemblages of various cultures in the hope of reconstructing diet and understanding resource utilization. In general, most studies tend to focus on broad economic trends such as specialized patterns of resource procurement. In this particular study, attention was paid to the specific make up of the Pre-Contact diet; what the site occupants were eating, season of availability, and habitat of availability. Focus was placed on determining the presence or absence of horticultural or agricultural plants and any signs of plant domestication.

One of the great downfalls of archaeobotanical study is its tendency to ignore the dynamic aspect of human interactions with plants. Wetterstrom (1994:81) has noted that people's food patterns are not merely a response to their environment, but an integral part of their belief system and cultural coding. Consequently, it is important to understand that botanical assemblages from most sites are incomplete and skewed records of past human diets. Quantification of plant remains is strictly avoided due to inconsistencies in the deposition, preservation, and recovery of archaeobotanical assemblages. Certain plants (nutshell) are structurally sound and preserve quite well and are therefore consistently over-represented within archaeological record. Other plants are often under-represented or simply absent from the record because they were rarely ever cooked or because they possess no dense structural parts which could survive the firing process. Therefore, attempts to directly evaluate the nutritional importance of any given plant species within the diet of past populations are avoided and broader interpretations are sought.

#### Results

Analysis recovered and identified 10 different plant species the Tree Runner site. Three are introduced species; therefore, these were not used by the native inhabitants of this site. Eight of these species have medicinal value. Four of the plants could potentially have been used as food sources, and one has no economic or medicinal value. The following narrative outlines the botanical remains recovered from the site and is divided into sections based on plant use, such as edible plants with medicinal value, medicinal plants, plants with economic value, and non-native plants.

Edible Plants with Medicinal Value. Acorn (Quercus sp.) is a small fruit produced by the oak tree. This native perennial reaches 60 to 80 feet in height. The bark of the oak is dark gray and furrowed into broad plates and ridges. The acorn itself is ovoid in shape and matures after two years of growth. The fruit ripens and is ready for harvest from September to late October. The acorn was an important food crop for both Pre-Contact and modern populations. The fruit can be eaten whole, but contains tannins which are very bitter and not digestible by humans. To leach the tannins, aboriginal groups would bury the acorns in mud or damp sand for a year and then dig them up and roast them. Alternatively, the acorns would be shelled, put into open baskets, and allowed to mold.

The mold would then be scraped off and used as an antibiotic on open sores (Moerman 1998). Instead of leaching, acorns can also be processed for consumption by boiling, as long as the water is changed repeatedly until it runs clear. In addition to eating the fruit whole, Native Americans would grind the fruit into a fine meal and use it to make bread (Moerman 1998). Oak bark can be chewed as a treatment for diarrhea and mouth sores. Native American groups have historically used a compound decoction of oak bark in witchcraft to treat or cure "waywardness" in women (Moerman 1998:458).

Hickory nuts (*Carya sp.*) ripen from September through November and are a reliable source of food for game animals. They can also be eaten raw by humans. Traditionally, the nut was used to produce a milky drink by pounding the nutshell and kernel into a fine powder and then adding it to water (Angier 1974). Unripe nutshell contains a toxin that can be used as a fish poison by boiling the nutshell and adding the secretion to an area of water. The poison temporally stuns the fish causing them to float to the surface. The roots of the hickory were also traditionally used as a cure for stomach aches (Moerman 1998:140; Mozingo 1998:50).

Maize (*Zea mays*) was one of the most important economic plants for Pre-Contact and historic populations. This tall annual grows from June until October, and if properly stored becomes a good year-round source of food. Maize grows best in cultivated fields, waste places, and trash heaps. Medicinally, cornmeal can be used to treat heart palpitations. Native Americans have historically placed warm cobs on irritated areas to relieve glandular swelling (Moerman 1998:610).

Sumpweed (*Iva xanthifolia*) is native to North America and prefers sandy damp areas along stream-beds and flood plains. It grows 2 to 10 feet in height and is available from July to September. Pre-Contact populations utilized sumpweed as an indigenous cultigen, growing and harvesting it as a grain. Traditionally, decoctions were made from the plant and used as cough suppressants. Lotions

containing the plant were applied to boils to relieve swelling. Root doctors also used sumpweed as the key ingredient in a lotion that was rubbed on the body to repel witches (Moerman 1998:279).

*Medicinal Plants.* Copperleaf (*Acalypha gracilens*) is an native annual herb that grows in thinly wooded habitats and on disturbed ground. Copperleaf favors Piedmont regions but grows in a wide variety of locations, including the coastal region of South Carolina. It is available from June until the first frost. The plant is not commonly considered edible, but the roots of this plant have been historically used as a key ingredient in a decoction used to treat kidney and bladder infections (Porcher 1863:120).

Pitch Pine (*Pinus rigida*) is a native perennial that can reach heights of 40 to 60 feet. This large tree is salt tolerant, can grow in all soil types, and has a life cycle of 5-20 years. Pitch Pine has a dark scaly bark and produces a ovid fruit cone, 2 to 4 inches long. The fruit cone takes two years to mature; once it reaches maturity, it drops seeds during the month of September. Medicinally, pitch is extracted from the tree and is applied to the skin to treat symptoms of rheumatism and to dress burns. Additionally, an infusion of pitch can be applied as a poultice to boils to drain them (Moerman 1998:412).

**Plants without Economic Value.** Paspalum (*Paspalum sp.*) is a member of the grass family and prefers coastal environments. This plant is not commonly considered edible, but is at times utilized as an emergency food source. It most often serves as fodder for livestock (Moerman 1998:379).

**Non-Native Plants.** Cornbind (*Polygonum convolvulus*) is a creeping annual introduced from Europe. It produces small green flowers from May until September and prefers disturbed areas, open woods, and roadsides. Cornbind can be eaten as a potherb in moderate quantities, if boiled. The herb contains oxalic acid which binds to minerals and makes them unavailable to the body, leading to mineral deficiency. Boiling reduces the amount of oxalic acid. Additionally, the seed can be ground into a powder and used in gruel or bread (Moerman:1998:422).

Starwort (*Stellaria L*.) is a low spreading perennial native to Europe and Asia. It produces small white flowers, shaped like stars, that close at night and on cloudy days, and open in the sunshine. The starwort growth cycle begins in the fall; it survives freezing conditions and blooms in the late winter, dropping seeds in the early spring. It prefers open fields and wetlands. Starwort has traditionally been eaten as potherb and does not require cooking. The leaves contain triterpenoid

saponins, flavonoids, and vitamin C and have consequently been used in traditional medicine to treat a variety of skin irritations including rashes, eczema, and inflammation. Native Americans strained a decoction of the leaves and used it as a wash for swollen and sore eyes (Chevallier 1996:270).

Stinkgrass (*Eragrostis cilianensis*) is an invasive weedy annual introduced from Europe. It produces small spikelets or flowers 15 mm long and it blooms from June until October. Stinkgrass prefers to grow along streambanks, in fields, and along roadsides. The glands emit a foul odor when crushed, giving the plant its common name. Additionally it is believed to be mildly toxic if ingested (Missouri Toxic Plant Database 2005).

#### **Conclusions**

Recovery of archaeobotanical remains from the Tree Runner site was minimal (Table 22). Overall, the small botanical assemblage was dominated by naturally occurring wild species rather than cultivars. The only indicator of plant domestication was seen in the three maize cupules recovered from Feature 604. Additionally, three of the samples were contaminated by introduced European species.

Table 22. Recovered Plant Species by Provenience.

	<u>F603</u>	<u>F604</u>	<u>F605</u>	<u>F608</u>	<u>F609</u>
<u>Taxa</u> Acorn	1	4			
Copperleaf		1			
Cornbind Hickory		5	1	11	1 9
Maize Paspalum	1	3			
Pitch Pine Starwort		1			1
Stinkgrass Sumpweed				1	1

Feature 604 contained a mixture of native and introduced species. Maize was introduced from Central America and starwort was introduced from Europe and Asia. The native species within Feature 604 were from tree species (oak and hickory) located within site boundaries and a locally

occurring weed (copperleaf). Feature 604 also contained six Stallings ceramic fragments and one plain sherd with coarse sand temper. The presence of maize and starwort indicate a disturbed context for this feature.

Feature 609 also contained a mixture of native and introduced species. Cornbind and stinkgrass are both European species. Artifacts from Feature 609 consists solely of Wilmington ceramics. Unfortunately, the presence of two introduced European species indicate Feature 609 suffered from contamination previous to or during excavation.

Features 603, 605, and 608 contained no diagnostic artifacts. Therefore, any archaeobotanical remains cannot be specifically attributed to any of the site's Pre-Contact components. Due to contamination or a lack of diagnostic artifacts, the botanical remains from the Tree Runner site cannot contribute to our understanding of plant use as it relates to the site's aboriginal occupants.

# Chapter VI. Discussion and Interpretations

The Tree Runner site produced limited data about its Ceramic Late Archaic occupants with the exception of the ceramic vessels. There are limited lithic tools and no shell tools. Both the faunal and archaeobotanical remains failed to provide us with information about diet and procurement strategies. (Results of faunal analysis are discussed in detail in Appendix D.) Additionally, this site did not contain a large shell midden or shell processing area, thereby suggesting that its use is not related to shellfish processing. This chapter will discuss each of these issues and provide data to support our hypothesis that this site was a resource procurement camp, mostly likely botanical, that was visited frequently and not a long-term encampment. Additionally, we will provide comparisons of this site's Stallings ceramics to other assemblages within the immediate area.

# **Absence of Long-Term Occupation Evidence**

Ideally, archaeological data recovery provides evidence of site use. However, it is often the case that a lack of particular artifacts and site components can be just as informative. Typically, Ceramic Late Archaic occupation sites contain several artifact classes that can be attributed to long-term occupation. These often include large numbers of ceramic sherds, steatite vessels and cooking disks, baked clay objects, cooking stones, lithic and shell tools, and evidence of lithic tool production. At the Tree Runner site, the majority of these artifact classes are absent.

Archaeological data recovery revealed only two lithic tool fragments; both are Coastal Plain chert. These include one projectile point fragment and one biface fragment. As stated previously, these two small fragments could be part of the same stone tool and are too small to be defined typologically. No shell tools were recovered from the site. This lack of lithic and shell tools indicates that activities at the site did not require the use of shell or lithic tools.

The limited diversity of lithic debitage present at the site indicates only limited resharpening of extant tools. It also suggest the resource procurement use of the site did not require manufacture or significant maintenance of the stone tools that they brought to the site. Lithic use at the site was extremely limited with one or two being broken or lost. Although three Coastal Plain chert cobble cores were recovered, all retained significant proportions of cobble cortex.

At the Tree Runner site, none of the limited faunal remains could be attributed to the Ceramic Late Archaic occupation of the site. Likewise, the limited shell midden cannot be attributed to this early occupation. Correspondingly, archaeobotanical remains recovered at the site could not be attributed to its Ceramic Late Archaic component.

Additionally, we recovered no steatite vessels or cooking disks. Our archaeological excavations failed to uncover any hearths or fire cracked rock. We recovered no cooking stones or baked clay objects. The ceramic vessels show no evidence of sooting. Only one small pit feature (Feature 604) could be attributed to the Ceramic Late Archaic use of the site. It contained Stallings sherds and a small amount (150.5 grams) of oyster shell.

These indicators strongly suggests that the Tree Runner site was used for resource procurement which did not require the use of fires or cooking and created few subsurface features such a debris or smudge pits. It may be suggested that any cooking done at the site was accomplished in baskets; however, the lack of cooking stones, hearths, and baked clay objects does not lend credence to this hypothesis. While archaeological data recovery failed to identify the resource being procured, the large number of broken vessels indicates extensive or frequent use of the area for procurement of a specific resource that required storage or processing in ceramic vessels.

## **Comparison With Other Stallings Components**

In the immediate vicinity of 38BU1800 are two other sites with Stallings components. At 38BU1787, two Stallings vessels are identified, one plain and one drag and jab (Shah et al. 2005 [in draft]). Both have smoothed interior surfaces, no sooting, and no fire clouding. At 38BU1791, the Shell Crescent site, five Stallings vessels are identified, including four plain and one finger impressed (Mozingo et al. 2004:140-142). These vessels include two with slipped interior surfaces, one with interior sooting, and none with fire clouding. Due to the lack of surface sooting, vessel context and/or research focus, radiocarbon dating of these vessels was not performed.

At the Fish Haul site, Trinkley (1986) stated that the Stallings vessels showed evidence of coil manufacture based on radiographic evidence. He then suggested that this trait indicates a late Stallings component with dates of approximately 1800 BC, and supported by radiocarbon dates for

three Stallings period features ranging from 1770 BC to 133 BC (Trinkley 1986). Trinkley (1986) does not describe the Stallings ceramics as to surface decoration or vessel form.

In summary, the Tree Runner site has two types of decoration not seen at the other Palmetto Bluff sites, separate punctate and drag and jab. This could indicate a different temporal period or personal preference of the potters. More radiocarbon dating of Stallings period vessels in the Palmetto Bluff area needs to be conducted before a possible decorative sequence can be determined.

#### **Absence of Soil Features**

At the Tree Runner site, our investigations failed to uncover Stallings period features other than Features 602 and 612 which both consisted of sherd clusters. We found no trash pits, no associated midden, no burials, or hearths. This absence of features may indicate a very short-term occupation or a use of the site that would not necessarily create subsurface features. This supports our hypothesis that the site was used for the collection of a botanical resource.

However, it is also possible that local soils are not conducive to preservation of features. Generally, Stallings period features seem to be rare in the Palmetto Bluff tract, with none being discovered at either the Shell Crescent site (Mozingo et al. 2004) or the 38BU1787 (Shah et al. 2005 [in draft]). This lack of Stallings period features may be due to soil type or occupation strategies during the period.

#### Conclusion

The ceramic vessel information from the Tree Runner site provided us with the best data we have to date from the Stallings period in the Palmetto Bluff tract. Other data, such as lithic use, features, faunal procurement, and archaeobotanical usage are poor. However, the ceramic data give us the opportunity to build a basis of information related to ceramic production, use, and form in this locale. Future studies may provide us with supporting data about resource procurement and length of occupation that can support our hypothesis of short-term occupation of this site for botanical resource procurement.

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Appendix A.
Artifact Catalog

# **Artifact Catalog**

Brockington and Associates, Inc. uses the following proveniencing system. Provenience 1 designates general surface collections. Numbers after the decimal point designate subsequent surface collections, or trenches. Proveniences 2 to 200 designate shovel tests. Controlled surface collections and 50 by 50 cm units are also designated by this provenience range. Proveniences 201 to 400 designate 1 by 1 m units done for testing purposes. Proveniences 401 to 600 designate excavation units (1 by 2 m, 2 by 2 m, or larger). Provenience numbers over 600 designate features. For all provenience numbers except 1 the numbers after the decimal point designate levels. Provenience X.0 is a surface collection at a shovel test or unit. X .1 designates level one, and X.2 designates level two. For example, 401.2 is Excavation Unit 401, level 2. Flotation samples are designated by a 01 added after the level. For example, 401.201 is the flotation material from Excavation Unit 401, level 2.

SITE NU	MBER:	38BU1800			
LOCUS:					
PROVENIEN	NCE NUM	BER: 2	. 1 N500, E500, 50x50cm unit, 0-70cm	bd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	19.00	plain body sherd, fiber temper	Stallings	
2	3	11.50	residual sherd		
PROVENIEN	NCE NUM	BER: 3	. 1 N500, E507.5, 50x50cm unit, 0-80c	mbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	67.30	plain body sherd, fiber temper	Stallings	coarse sand also
2	1	1.80	residual sherd		
PROVENIEN	NCE NUM	BER: 4	. 1 N500, E515, 50x50cm unit, 0-66cm	bd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	8	23.80	residual sherd		1 rim
PROVENIEN	VCE NUM	BER: 5	. 1 N500, E522.5, 50x50cm unit, 0-70c	mbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	4	55.90	plain rim sherd, coarse sand temper	untyped	2 mend; 2 mend; 3 mend along w/ 2 from 5.1:2; 2 mend along w/ 1 from 5.1:2; (all of these mends stored in 5.1:1 bag)
2	41	456.20	plain body sherd, coarse sand temper	Deptford	3 mend; 2 mend; 2 mend; AND 1 mends w/ 2 from 5.1:1 & 2 mend w/ 3 from 5.1:1 (mends w/ 5.1:1 stored in 5.1:1 bag)
3	1	18.20	plain rim sherd, grog temper	Wilmington	
4	13	6.50	residual sherd		
5	6	158.10	simple stamped rim sherd, coarse sand temper	Refuge	
6	8	346.30	simple stamped body sherd, coarse sand temper	Refuge	

Site Number	r:	38BU1800			
PROVENIE	NCE NUM	BER: 6	6. 1 N500, E537.5, 50x50cm unit, 0-40cm	bd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	16.50	plain body sherd, fiber temper	Stallings	
2	1	14.50	random incised body sherd, coarse sand temper	Refuge	
3	1	3.70	check stamped rim sherd, fine/medium sand temper	Irene, Shell Crescent Variant	diamond
4	1	3.10	residual sherd		
PROVENIE	NCE NUM	BER: 7	1. N500, E545, 50x50cm unit, 0-60cmbd	1	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	13.30	plain body sherd, coarse sand temper	untyped	
PROVENIE	NCE NUM	BER: 8	N500, E552.5, 50x50cm unit, 10-50cm	mbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	7.00	cord marked body sherd, fine/medium sand temper	Deptford	crosshatched, mend
PROVENIE	NCE NUM	BER: 9	0. 1 N507.5, E500, 50x50cm unit, 15-50cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	12	37.30	residual sherd		
2	3	29.00	cord marked body sherd, grog temper	Wilmington	mend
3	3	108.50	cord marked body sherd, grog temper	Wilmington	2 with shell scraped interior
4	2	31.60	cord marked rim sherd, grog temper	Wilmington	1 with cord marked interior, 1 with shell scraped interior
PROVENIE	NCE NUM	BER: 10	0. 1 N507.5, E507.5, 50x50cm unit, 0-45cm	mbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	7.30	complicated stamped body sherd, coarse sand temper	Mississippian	
2	1	4.30	eroded body sherd, fine/medium sand temper	untyped	
PROVENIE	NCE NUM	BER: 11	. 1 N507.5, E515, 50x50cm unit, 0-65cm	bd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	0.40	Coastal Plain chert flake		
2	1	13.70	cob impressed body sherd, fine/medium sand temper	Irene, Shell Crescent Variant	
3	1	5.50	body sherd with unidentifiable decoration, fine/medium sand temper	untyped	
4	1	5.80	cord marked body sherd, grog temper	Wilmington	
5	10	26.40	residual sherd		

Site Number	r: 3	38BU1800			
PROVENIEN	NCE NUMB	BER: 12	. 1 N507.5, E522.5, 50x50cm unit, 0-50cm	embd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.10	unidentified stamped body sherd, coarse sand temper	untyped	
2	2	5.50	Coastal Plain chert flake fragment		
3	2	5.40	residual sherd		1 rim
PROVENIEN	NCE NUMB	BER: 13	. 1 N507.5, E530, 50x50cm unit, 0-55cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	4.40	body sherd with unidentifiable decoration, fine/medium sand temper	untyped	
2	1	9.20	cob impressed body sherd, coarse sand temper	Irene, Shell Crescent Variant	
3	2	5.10	residual sherd		
PROVENIEN	NCE NUMB	BER: 14	. 1 N507.5, E537.5, 50x50cm unit, 20-35	5cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	4.50	body sherd with unidentifiable decoration, coarse sand temper	untyped	
2	2	4.10	rim sherd with unidentifiable decoration, coarse sand temper	untyped	mend
3	1	2.10	residual sherd		
PROVENIEN	NCE NUMB	BER: 15	. 1 N507.5, E545, 50x50cm unit, 20-60c	mbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.80	random incised body sherd, coarse sand temper	untyped	
2	1	4.90	body sherd with unidentifiable decoration, coarse sand temper	untyped	
3	1	1.30	residual sherd		rim
4	1	2.70	olive green bottle glass		
PROVENIEN	NCE NUMB	BER: 16	. 1 N515, E500, 50x50cm unit, 10-30cm	bd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	7.90	cord marked body sherd, grog temper	Wilmington	
2	2	4.30	residual sherd		
PROVENIEN	NCE NUMB	BER: 17	. 1 N515, E507.5, 50x50cm unit, 0-60cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.80	check stamped body sherd, coarse sand temper	Deptford	
2		43.90	faunal remains		
3	7	15.50	residual sherd		

Site Number	r:	38BU1800			
PROVENIEN	NCE NUMI	BER: 18	. 1 N515, E515, 50x50cm unit, 0-65cmb	d	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	9.10	cord marked body sherd, grog temper	untyped	
2	2	5.00	check stamped body sherd, coarse sand temper	Deptford	
3	8	12.20	residual sherd		1 rim
4	1	2.30	fabric impressed rim sherd, coarse sand temper	Deptford	
PROVENIEN	ICE NUM	BER: 19	. 1 N515, E522.5, 50x50cm unit, 0-60cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	12.00	plain body sherd, fiber temper	Stallings	
2	1	8.00	check stamped body sherd, fine/medium sand temper	Deptford	
3	1	3.40	cord marked body sherd, grog temper	untyped	very small
4	1	1.70	residual sherd		
PROVENIEN	ICE NUM	BER: 20	. 1 N515, E530, 50x50cm unit, 0-30cmb	d	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	7.00	cord marked body sherd, grog temper	untyped	
PROVENIEN	ICE NUM	BER: 21	. 1 N515, E537.5, 50x50cm unit, 30-50c	mbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	3.90	residual sherd		
PROVENIEN	ICE NUM	BER: 22	. 1 N515, E552.5, 50x50cm unit, 0-40cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	0.40	residual sherd		
PROVENIEN	ICE NUM	BER: 23	. 1 N515, E560, 50x50cm unit, 0-20cmb	d	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	5.40	cord marked body sherd, grog temper	untyped	
PROVENIEN	ICE NUM	BER: 24	. 1 N522.5, E500, 50x50cm unit, 0-30cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	31.50	cord marked body sherd, very coarse sand temper	Deptford	also scraped, heavy tempering
2	1	5.90	cord marked body sherd, grog temper	untyped	
3	2	2.50	residual sherd		
PROVENIEN	ICE NUM	BER: 25	. 1 N522.5, E507.5, 50x50cm unit, 0-50cm	embd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	4.40	cord marked body sherd, grog temper	Wilmington	
2	4	12.50	residual sherd		

Site Number	r <b>:</b>	38BU1800			
3		0.20	faunal remains		
PROVENIEN	ICE NUM	BER: 26	N522.5, E530, 50x50cm unit, 0-45cm	ıbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	9.50	cord marked body sherd, grog temper	Wilmington	
PROVENIEN	ICE NUM	BER: 27	. 1 N522.5, E545, 50x50cm unit, 10-30cm	mbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	0.40	Coastal Plain chert flake		heat treated
2	2	4.10	residual sherd		
PROVENIEN	ICE NUM	BER: 28	. 1 N522.5, E552.5, 50x50cm unit,10-30cm	cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	1.70	residual sherd		
2	1	12.00	Coastal Plain chert shatter		heat treated
PROVENIEN	ICE NUM	BER: 29	. 1 N522.5, E560, 50x50cm unit, 0-40cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	4	5.10	residual sherd		
2	1	7.90	daub or fired clay		
3		3.20	faunal remains		
PROVENIEN	ICE NUM	BER: 30	. 1 N522.5, E567.5, 50x50cm unit, 0-40c	embd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	3.70	cord marked body sherd, very coarse sand temper	Deptford	
2	2	2.60	Coastal Plain chert shatter		hydrated
PROVENIEN	ICE NUM	BER: 31	. 1 N530, E500, 50x50cm unit, 0-20cmbd	d	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	2.70	residual sherd		
PROVENIEN	ICE NUM	BER: 32	. 1 N530, E507.5, 50x50cm unit, 0-30cm	ıbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	3	4.30	residual sherd		
PROVENIEN	ICE NUM	BER: 33	. 1 N530, E515, 50x50cm unit, 0-70cmbd	d	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	6	10.40	residual sherd		
	ICE NUM	BER: 34	. 1 N530, E537.5, 50x50cm unit, 0-70cm	nbd	
PROVENIEN				Ceramic Type	Comments
PROVENIEN Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
PROVENIEN  Catalog #  1	Count 1	Weight (in g) 7.30	cord marked body sherd, grog temper	untyped	Comments

Site Number	r:	38BU1800			
PROVENIEN	NCE NUM	BER: 35	. 1 N530, E545, 50x50cm unit, 0-30cmbd		
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.10	plain body sherd, fine/medium sand temper	untyped	
2	1	4.30	residual sherd		
PROVENIEN	NCE NUM	BER: 36	. 1 N530, E560, 50x50cm unit, 0-75cmbd		
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	7	13.90	residual sherd		
2	2	20.60	plain body sherd, coarse sand temper	untyped	
PROVENIEN	NCE NUM	BER: 37	. 1 N537.5, E515, 50x50cm unit, 0-65cml	od	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	4.90	residual sherd		
PROVENIEN	NCE NUM	BER: 38	. 1 N537.5, E530, 50x50cm unit, 0-45cml	od	
Catalog #	Count		Artifact Description	Ceramic Type	Comments
1	4	8.60	residual sherd		
2	1	1.10	Coastal Plain chert flake fragment		heat treated
PROVENIEN	NCE NUM	BER: 39	. 1 N537.5, E552.5, 50x50cm unit, 40-656	embd	
Catalog #	Count		Artifact Description	Ceramic Type	Comments
1	3	37.60	punctate body sherd, fiber temper	Stallings	mend
2	1	3.90	punctate rim sherd, fiber temper	Stallings	mond
3	2	6.10	residual sherd	· ·	
PROVENIEN	NCE NUM	BER: 40	. 1 N537.5, E567.5, 50x50cm unit, 0-14ci	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	1.20	residual sherd		
PROVENIEN	NCF NUM	RER: ∕\1	. 1 N545, E507.5, 50x50cm unit, 0-35cml	nd.	
Catalog #	Count		Artifact Description	Ceramic Type	Comments
1	3	8.50	residual sherd	J.	
2	1	5.80	plain body sherd, very coarse sand temper	untyped	
PROVENIEN	ICE NUM	DED. 42	1 N545 E515 50v50am unit 0.45ambd		
Catalog #	Count		. 1 N545, E515, 50x50cm unit, 0-45cmbd Artifact Description	Ceramic Type	Comments
			·	•	Comments
1 2	1	6.40 6.20	eroded body sherd, very coarse sand temper residual sherd	untyped	
				1	
PROVENIEN Catalog #		BER: 43 Weight (in g)	. 1 N545, E522.5, 50x50cm unit, 0-35cml		Commanta
Catalog #	Count	0 ( 0)	Artifact Description	Ceramic Type	Comments
1	3	5.90	residual sherd		

Site Number	:	38BU1800			
PROVENIEN	ICE NUMI	BER: 44	. 1 N545, E537.5, 50x50cm unit, 0-35cml	od	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	5.00	plain body sherd, coarse sand temper	untyped	
PROVENIEN	ICE NUM	BER: 45	. 1 N552.5, E552.5, 50x50cm unit, 0-60cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	17.10	plain rim sherd, fiber temper	Stallings	
2	1	8.60	cord marked body sherd, fine/medium sand temper	Deptford	crosshatched
3	3	6.20	residual sherd	fiber temper	
PROVENIEN	ICE NUMI	BER: 46	. 1 N552.5, E560, 50x50cm unit, 35-50cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	4.30	plain body sherd, fine/medium sand temper	untyped	
PROVENIEN	ICE NUM	BER: 47	. 1 N552.5, E567.5, 50x50cm unit, 0-40cm	nbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	5.10	cord marked body sherd, fine/medium sand temper	untyped	
PROVENIEN	ICE NUMI	BER: 48	. 1 N560, E560, 50x50cm unit, 0-40cmbd	l	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	4.10	residual sherd		
PROVENIEN	ICE NUM	BER: 49	. 1 N500, E530, 50x50cm unit		
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1			bag lost in field	notes indicate 3 sherds recovered	
PROVENIEN	ICE NUMI	BER: 401	. 1 Excavation unit 401, level 1, 1x2m un	it, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	6	17.70	residual sherd		
2	1	6.00	eroded body sherd, fine/medium sand temper	untyped	
PROVENIEN	ICE NUMI	BER: 401	. 2 Excavation unit 401, level 2, 1x2m un	it, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	3	14.00	residual sherd		
PROVENIEN	ICE NUM	BER: 401	. 3 Excavation unit 401, level 3, 1x2m un	it, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	27.90	plain body sherd, fiber temper	Stallings	mend
2	1	13.60	simple stamped body sherd, fine/medium sand temper	Refuge	
3	1	12.50	simple stamped rim sherd, fine/medium sand temper	Refuge	

Site Number	r <b>:</b>	38BU1800			
4	6	9.30	residual sherd		
PROVENIEN	ICE NUMI	BER: 401	. 4 Excavation unit 401, level 4, 1x2m un	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	44.30	plain body sherd, fiber temper	Stallings	
2	2	56.10	simple stamped body sherd, fine/medium sand temper	Refuge	mend
3	2	8.40	residual sherd		
PROVENIEN	ICE NUMI	BER: 401	. 5 Excavation unit 401, level 5, 1x2m un	nit, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	10.20	plain rim sherd, fiber temper	Stallings	
2	1	6.60	plain body sherd, fiber temper	Stallings	
3	1	1.80	residual sherd		
LOCUS:		Block A			
PROVENIEN	ICE NUMI	BER: 416	Excavation unit 416, level 1, 1x2 m u	ınit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	2.30	undecorated whiteware		rim
2	1	4.50	cord marked body sherd, grog temper	Wilmington	
3	1	4.60	check stamped body sherd, fine/medium sand temper	untyped	
PROVENIEN	ICE NUMI	BER: 416	Excavation unit 416, level 2, 1x2 m u	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	5.10	punctate body sherd, fiber temper	Stallings	
2	1	2.00	cord marked rim sherd, fine/medium sand temper	untyped	
3	1	6.80	fabric impressed body sherd, fine/medium sand temper	Mississippian	crosshatched
4	1	6.30	rim sherd with unidentifiable decoration, coarse sand temper	untyped	
5	1	5.30	cord marked body sherd, grog temper	Wilmington	
6	5	77.70	cord marked body sherd, grog temper	Wilmington	with other punctate, mend & 2 mend
7	5	10.60	residual sherd		
PROVENIEN	ICE NUMI	BER: 416	Excavation unit 416, level 3, 1x2 m u	unit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	18.40	eroded body sherd, fiber temper	Stallings	
2	6	32.90	plain body sherd, fiber temper	Stallings	2 mend
3	3	51.70	body sherd with unidentifiable decoration, very coarse sand temper	untyped	2 mend

Site Number:		38BU1800			
4	11	168.20	cord marked body sherd, grog temper	Wilmington	2 mend, 2 mend & 5 mend. Underlayer cord marked decoration evident.
5	5	10.90	residual sherd		1 rim
6	1	69.20	translucent quartz core fragment		
PROVENIEN	CE NUMI	BER: 416	5. 4 Excavation unit 416, level 4, 1x2 m un	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	34.00	punctate rim sherd, fiber temper	Stallings	mends with 416.4:2
2	5	21.40	punctate body sherd, fiber temper	Stallings	mends with 416.4:1 & 416.4:3
3			number not used		
4	1	5.10	cord marked body sherd, grog temper	Wilmington	
5	2	3.30	residual sherd		
PROVENIEN	CE NUMI	BER: 416	5. 5 Excavation unit 416, level 5, 1x2 m unit 416	nit, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	5	39.20	slipped body sherd, fiber temper	Stallings	all mend
2	6	9.60	residual sherd		
PROVENIEN	CE NUMI	BER: 417	7. 1 Excavation unit 417, level 1, 1x2 m un	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	5	10.00	residual sherd		
2	1	2.30	cord marked body sherd, fine/medium sand temper	untyped	
PROVENIEN	CE NUMI	BER: 417	Excavation unit 417, level 2, 1x2 m unit 417	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	7	14.80	residual sherd		
2	1	5.10	eroded body sherd, fiber temper	Stallings	
PROVENIEN	CE NUMI	BER: 417	7. 3 Excavation unit 417, level 3, 1x2 m unit 417	nit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	44.70	plain body sherd, fiber temper	Stallings	with drill hole
2	3	55.50	plain body sherd, fiber temper	Stallings	
3	1	5.30	eroded body sherd, fiber temper	Stallings	
4	1	8.90	cord marked body sherd, fine/medium sand temper	Savannah	
5	1	4.80	plain body sherd, fine/medium sand temper	untyped	
6	1	6.10	fabric impressed body sherd, grog temper	Wilmington	
7	1	12.00	body sherd with unidentifiable decoration, fine/medium sand temper	untyped	
8	8	7.90	residual sherd		
9		0.40	faunal remains		

Site Number	<b>r:</b> 3	8BU1800			
10	1	0.40	Coastal Plain chert flake fragment		
11	1	3.20	petrified wood		
PROVENIEN	NCE NUMB	ER: 417	. 4 Excavation unit 417, level 4, 1x2 m un	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	122.50	random incised body sherd, fiber temper	Stallings	mend
2	2	12.60	plain body sherd, fiber temper	Stallings	
3	3	3.50	residual sherd		
PROVENIEN	NCE NUMB	ER: 418	. 1 Excavation unit 418, level 1, 1x2 m un	nit, 0-10cmbd	
Catalog #	Count	$Weight (in \ g)$	Artifact Description	Ceramic Type	Comments
1	1	2.40	residual sherd		
PROVENIEN	NCE NUMB	ER: 418	. 2 Excavation unit 418, level 2, 1x2 m un	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	16.50	check stamped body sherd, coarse sand temper	Deptford	
2	1	7.50	cord marked body sherd, coarse sand temper	untyped	
3	1	3.60	body sherd with unidentifiable decoration, grog temper	untyped	
4	1	3.40	check stamped body sherd, very coarse sand temper	untyped	diamond check
5	1	6.50	burnished body sherd, very coarse sand temper	Mississippian	
6	5	7.80	residual sherd		
PROVENIEN	NCE NUMB	ER: 418	. 3 Excavation unit 418, level 3, 1x2 m un	nit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	7.90	cord marked body sherd, coarse sand temper	untyped	2 mend
2	1	60.70	scraped body sherd, coarse sand temper	Refuge	
3	1	6.90	Coastal Plain chert flake		
4	5	2.70	residual sherd		
PROVENIEN	NCE NUMB	ER: 418	• 4 Excavation unit 418, level 4, 1x2 m un	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	3.50	punctate body sherd, fiber temper	Stallings	
PROVENIEN	NCE NUMB	ER: 418	. 5 Excavation unit 418, level 5, 1x2 m un	nit, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	0.20	Coastal Plain chert thinning flake		
PROVENIEN	NCE NUMB	ER: 419	. 1 Excavation unit 419, level 1, 1x2 m un	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
Cuiuiog #					

Site Number	r: :	38BU1800			
PROVENIEN	NCE NUME	BER: 419	Excavation unit 419, level 2, 1x2 m u	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	16.50	plain rim sherd, very coarse sand temper	Refuge	
2	1	4.60	cord marked body sherd, grog temper	Wilmington	
3	1	4.70	check stamped body sherd, coarse sand temper	untyped	
4	6	11.50	residual sherd		
5		6.60	scallop		
PROVENIEN	NCE NUME	BER: 419	Excavation unit 419, level 3, 1x2 m u	nit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	20.60	plain rim sherd, coarse sand temper	Refuge	
2	1	5.50	plain rim sherd, fiber temper	Stallings	
3	1	4.40	plain body sherd, fiber temper	Stallings	
4	2	55.40	simple stamped rim sherd, coarse sand temper	Refuge	mend
5	1	5.40	cord marked body sherd, grog temper	Wilmington	
PROVENIEN	NCE NUME	BER: 419	Excavation unit 419, level 4, 1x2 m u	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	5.10	Coastal Plain chert flake		
2	1	14.80	plain body sherd, fiber temper	Stallings	
3	2	39.30	slipped body sherd, fiber temper	Stallings	
4	2	6.40	eroded rim sherd, very coarse sand temper	untyped	
PROVENIEN	NCE NUME	BER: 419	Excavation unit 419, level 5, 1x2 m u	nit, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	7.70	slipped body sherd, fiber temper	Stallings	
2	1	1.00	residual sherd	<i>g</i> .	
PROVENIEN	NCE NUME	RFR 110	Excavation unit 419, level 6, 1x2 m u	nit 50-60cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
			•	~ 1	Comments
1	1	6.80	eroded body sherd, fiber temper	Stallings	
PROVENIEN	NCE NUME	BER: 420	Excavation unit 420, level 1, 1x2 m u	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	3.50	eroded body sherd, grog temper	untyped	
2	9	13.50	residual sherd		
PROVENIEN	NCE NUME	BER: 420	Excavation unit 420, level 2, 1x2 m u	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	5.00	plain body sherd, fiber temper	Stallings	
				-	

Site Number	:	38BU1800			
3	1	3.40	body sherd with unidentifiable decoration, fine/medium sand temper	untyped	
4	4	7.80	residual sherd		
5		0.20	charcoal		
PROVENIEN	CE NUMI	BER: 420	Excavation unit 420, level 3, 1x2 m u	ınit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	3	26.50	plain body sherd, fiber temper	Stallings	
2	12	15.00	residual sherd		
3	2	0.30	Coastal Plain chert thinning flake		
4	1	0.30	rhyolite shatter		
PROVENIEN	CE NUMI	BER: 420	Excavation unit 420, level 4, 1x2 m u	unit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	11.60	plain body sherd, fiber temper	Stallings	
2	5	5.20	residual sherd	-	
PROVENIEN	CE NUMI	BER: 612	Excavation unit 420, feature 612, ent	ire feature	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	9	108.30	punctate rim sherd, fiber temper	Stallings	all mended including 5 body sherds
2	2	49.70	slipped body sherd, fiber temper	Stallings	
3	1	28.00	eroded body sherd, fiber temper	Stallings	
4	3	3.30	residual sherd		
5		0.10	nut		burned nut shell
LOCUS:		Block B			
PROVENIEN	CE NUMI	BER: 405	Excavation unit 405, level 2, 1x2 m u	ınit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		0.30	faunal remains		
2	1	2.70	eroded body sherd, fiber temper	Stallings	
3	1	3.60	simple stamped body sherd, fine/medium sand temper	untyped	
4	3	4.10	residual sherd		
PROVENIEN	CE NUMI	BER: 405	Excavation unit 405, level 3, 1x2 m u	ınit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	0.60	Coastal Plain chert flake		
2	1	0.20	Coastal Plain chert flake fragment		
3	2	39.00	plain body sherd, fiber temper	Stallings	
4	1	32.10	check stamped body sherd, fine/medium sand temper	Deptford	linear
5	2	41.40	random incised body sherd, fine/medium sand temper	Refuge	

Site Number	: 3	88BU1800			
6	7	77.80	simple stamped body sherd, coarse sand temper	Refuge	
7	7	14.80	residual sherd		
PROVENIEN	CE NUMB	ER: 405	. 4 Excavation unit 405, level 4, 1x2 m u	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	83.10	random incised rim sherd, fiber temper	Stallings	mend
2	1	2.20	rhyolite shatter		
3	1	3.60	residual sherd		
PROVENIEN	CE NUMB	ER: 405	. 5 Excavation unit 405, level 5, 1x2 m u	nit, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	0.40	Coastal Plain chert thinning flake		
2	5	6.30	residual sherd		
PROVENIEN	CE NUMB	ER: 407	. 1 Excavation unit 407, level 1, 1x2 m u	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	4.70	shotgun shell		base; "1901 Repeater No. 12"
2	1	6.30	rim sherd with unidentifiable decoration, fine/medium sand temper	untyped	
3	1	0.40	Coastal Plain chert flake		
4	11	24.70	residual sherd		
PROVENIEN	CE NUMB	ER: 407	. 2 Excavation unit 407, level 2, 1x2 m u	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	3	23.50	cob impressed body sherds, fine/medium sand temper	Irene, Shell Crescent Variant	
2	1	5.90	cord marked rim sherd, fine/medium sand temper	Savannah	
3	1	7.90	plain body sherd, fiber temper	Stallings	
4	1	4.50	plain body sherd, fine/medium sand temper	untyped	
5	10	16.00	residual sherd		
PROVENIEN	CE NUMB	ER: 407	• 3 Excavation unit 407, level 3, 1x2 m u	nit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	11	207.20	plain body sherd, fiber temper	Stallings	7 mend, 2 mend
2	4	8.70	residual sherd		
PROVENIEN	CE NUMB	ER: 407	. 4 Excavation unit 407, level 4, 1x2 m u	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	1.40	petrified wood		
2	1	0.20	Coastal Plain chert thinning flake		
3	3	16.50	plain body sherd, fiber temper	Stallings	2 mend
4	4	4.70	residual sherd	Stallings	

Site Number	:	38BU1800			
PROVENIEN	ICE NUMI	BER: 407	Excavation unit 407, level 5, 1x2 m u	nit, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	3.80	residual sherd	Stallings	
PROVENIEN	CE NUMI	BER: 409	Excavation unit 409, level 1, 1x2 m u	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	10.50	body sherd with unidentifiable decoration, coarse sand temper	untyped	
PROVENIEN	CE NUMI	BER: 409	Excavation unit 409, level 2, 1x2 m u	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	14	29.70	residual sherd		
2	1	4.80	eroded body sherd, coarse sand temper	untyped	
3	1	4.30	body sherd with unidentifiable decoration, very coarse sand temper	untyped	
4	2	1.40	Coastal Plain chert flake		
5	2	0.20	Coastal Plain chert thinning flake		
PROVENIEN	ICE NUMI	BER: 409	Excavation unit 409, level 3, 1x2 m u	nit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	11.00	cord marked body sherd, grog temper	Wilmington	
2	1	14.80	body sherd with unidentifiable decoration, coarse sand temper	untyped	
3	7	46.90	plain body sherd, fiber temper	Stallings	
4	9	21.80	residual sherd		
PROVENIEN	ICE NUMI	BER: 409	Excavation unit 409, level 4, 1x2 m u	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	2.90	plain body sherd, fiber temper	Stallings	
2	2	2.00	residual sherd		
3	2	0.20	Coastal Plain chert thinning flake		
4		1.20	faunal remains		
PROVENIEN	ICE NUMI	BER: 409	Excavation unit 409, level 5, 1x2 m u	nit, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	5.30	plain body sherd, fiber temper	Stallings	
PROVENIEN	ICE NUMI	BER: 410	. 1 Excavation unit 410, level 1, 1x2 m u	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.20	plain body sherd, coarse sand temper	untyped	
2	9	24.10	residual sherd		

PROVENIEN	ICE NUM	BER: 410	Excavation unit 410, level 2, 1x2 m un	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	5	10.70	residual sherd		
PROVENIEN	ICE NUM	BER: 410	Excavation unit 410, level 3, 1x2 m unit 410, level 4, 4x2 m unit	nit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	52.50	simple stamped rim sherd, coarse sand temper	Refuge	2 mend with 1 from 410.3:2
2	2	15.80	simple stamped body sherd, coarse sand temper	Refuge	1 mends with 2 from 410.3:1
3	1	5.90	body sherd with unidentifiable decoration, coarse sand temper	untyped	
4	9	69.40	plain body sherd, fiber temper	Stallings	3 mend
5	2	3.90	residual sherd		
PROVENIEN	ICE NUM	BER: 410	Excavation unit 410, level 4, 1x2 m un	nit, 30-40cmbd	_
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	3	17.60	plain body sherd, fiber temper	Stallings	
DROVENIEN	ICE NUM	DED. 411			
PROVENIEN Catalog #	Count	Weight (in g)	. 1 Excavation unit 411, level 1, 1x2 m un Artifact Description	Ceramic Type	Comments
			•		Comments
1	1	8.00	body sherd with unidentifiable decoration, fine/medium sand temper	untyped	
2	1	7.00	plain body sherd, fiber temper	Stallings	
3	5	9.30	residual sherd		
PROVENIEN	ICE NUM	BER: 411	. 2 Excavation unit 411, level 2, 1x2 m un	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.30	check stamped body sherd, coarse sand temper	untyped	combined with other stamp design
2	1	3.20	random incised body sherd, fine/medium sand temper	untyped	
3	2	12.10	punctate body sherd, fiber temper	Stallings	mend
4	1	3.00	plain body sherd, fiber temper	Stallings	
5	4	50.40	cord marked body sherd, very coarse sand temper	Deptford	
6	1	6.40	eroded body sherd, very coarse sand temper	untyped	
7	10	12.20	residual sherd		
8		8.20	whelk		columella
9	1	0.90	Coastal Plain chert flake		
10			number not used		
11	1	0.60	Coastal Plain chert biface fragment		midsection, heattreated
PROVENIEN	ICE NUM	BER: 411	. 3 Excavation unit 411, level 3, 1x2 m un	nit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments

Site Number:	38	BU1800			
1	1	11.60	punctate rim sherd, fiber temper	Stallings	mends with 411.3:2
2	1	8.90	punctate body sherd, fiber temper	Stallings	mends with 411.3:1
3	9	156.00	plain body sherd, fiber temper	Stallings	4 mend, 3 mend & 2 mend
4	1	4.10	plain body sherd, coarse sand temper	untyped	
5	10	15.70	residual sherd		
6	3	45.10	punctate body sherd, fiber temper	Stallings	
PROVENIENO	CE NUMBE	TR: 411	. 4 Excavation unit 411, level 4, 1x2 m u	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	0.10	Coastal Plain chert thinning flake		
PROVENIENO	CE NUMBE	CR: 412	. 1 Excavation unit 412, level 1, 1x2 m u	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	4.80	body sherd with unidentifiable decoration, coarse sand temper	untyped	
2	1	2.60	residual sherd		
PROVENIENO	CE NUMBE	CR: 412	Excavation unit 412, level 2, 1x2 m u	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	4	42.70	cord marked body sherd, grog temper	untyped	
2	1	13.70	cord marked rim sherd, very coarse sand temper	Deptford	
3	2	10.20	fabric impressed body sherd, grog temper	untyped	
4	1	4.10	eroded body sherd, coarse sand temper	untyped	
5	2	36.20	plain body sherd, coarse sand temper	untyped	mend
6	19	42.40	residual sherd		
7		8.90	faunal remains		
PROVENIENO	CE NUMBE	CR: 412	Excavation unit 412, level 3, 1x2 m u	nit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	7.70	roughened body sherd, fine/medium sand temper	untyped	
2	1	3.40	plain body sherd, fiber temper	Stallings	
3	2	19.50	body sherd with unidentifiable decoration, fine/medium sand temper	untyped	
4	1	0.30	rhyolite thinning flake		
PROVENIENO	CE NUMBE	CR: 413	. 1 Excavation unit 413, level 1, 1x2 m u	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.00	eroded body sherd, coarse sand temper	untyped	
2	2	12.50	body sherd with unidentifiable decoration, coarse sand temper	untyped	
3	2	1.30	residual sherd		

	:	38BU1800			
PROVENIEN	ICE NUMI	BER: 413	Excavation unit 413, level 2, 1x2 m unit 413,	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	3.40	body sherd with unidentifiable decoration, fine/medium sand temper	untyped	
2	1	7.80	body sherd with unidentifiable decoration, coarse sand temper	untyped	
3	2	13.30	body sherd with unidentifiable decoration, very coarse sand temper	untyped	2 mend
4	1	9.60	body sherd with unidentifiable decoration, grog temper	untyped	
5	2	14.80	cord marked body sherd, grog temper	untyped	
6	1	3.30	cord marked rim sherd, grog temper	untyped	
7	17	40.50	residual sherd		
8	1	6.80	rhyolite primary flake		
PROVENIEN	CE NUMI	BER: 413	Excavation unit 413, level 4, 1x2 m un	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	12.90	punctate body sherd, fiber temper	Stallings	
2	3	3.70	residual sherd		
3	4	0.60	Coastal Plain chert thinning flake		
4	1	0.20	Coastal Plain chert flake fragment		
DDOMENIEN	ICE MUM		1 5 3 5444 1 11 1 2		
INOVENIEN	CE NUMI	BER: 414	Excavation unit 414, level 1, 1x2 m un	nit, 0-10cmba	
PROVENIEN Catalog #	CE NUMI Count	BER: 414 Weight (in g)	Artifact Description	Ceramic Type	Comments
PROVENIEN Catalog # 1					Comments
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
Catalog #	Count	Weight (in g) 13.10	Artifact Description plain body sherd, fine/medium sand temper	Ceramic Type untyped	Comments
Catalog # 1 2 3	Count  1 1 5	Weight (in g) 13.10 3.90 9.90	Artifact Description  plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd	Ceramic Type untyped untyped	Comments
Catalog # 1 2	Count  1 1 5	Weight (in g) 13.10 3.90 9.90	Artifact Description  plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd	Ceramic Type untyped untyped	Comments  Comments
Catalog #  1 2 3  PROVENIEN	Count  1 1 5	Weight (in g) 13.10 3.90 9.90  BER: 414	Artifact Description  plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m unit	Ceramic Type untyped untyped nit, 10-20cmbd	
Catalog #  1 2 3  PROVENIEN Catalog # 1	Count  1 1 5  VCE NUMI  Count	Weight (in g)  13.10  3.90  9.90  BER: 414  Weight (in g)  0.80	Artifact Description  plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m un Artifact Description	Ceramic Type untyped untyped nit, 10-20cmbd	
Catalog #  1 2 3  PROVENIEN Catalog #	Count  1 1 5  VCE NUMI  Count	Weight (in g)  13.10  3.90  9.90  BER: 414  Weight (in g)	Artifact Description  plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m un Artifact Description rhyolite shatter charcoal	Ceramic Type untyped untyped nit, 10-20cmbd Ceramic Type	
Catalog #  1 2 3  PROVENIEN Catalog #  1 2	Count  1  1  5  VCE NUM  Count  1	Weight (in g)  13.10 3.90 9.90  BER: 414  Weight (in g) 0.80 0.30	Artifact Description  plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m un Artifact Description rhyolite shatter charcoal scraped body sherd, grog temper	Ceramic Type untyped untyped nit, 10-20cmbd Ceramic Type	
Catalog #  1 2 3  PROVENIEN  Catalog #  1 2 3	Count  1 1 5  VCE NUMI  Count 1	Weight (in g)  13.10  3.90  9.90  BER: 414  Weight (in g)  0.80  0.30  3.60	Artifact Description  plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m un Artifact Description rhyolite shatter charcoal	Ceramic Type untyped untyped nit, 10-20cmbd Ceramic Type	
Catalog #  1 2 3  PROVENIEN Catalog #  1 2 3 4	Count  1 1 5 CCE NUM Count 1 1 1 1 1 14	Weight (in g)  13.10 3.90 9.90  BER: 414  Weight (in g) 0.80 0.30 3.60 26.00 25.50	plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m un Artifact Description  rhyolite shatter charcoal scraped body sherd, grog temper plain body sherd, fiber temper residual sherd	Ceramic Type untyped untyped nit, 10-20cmbd Ceramic Type untyped Stallings	
Catalog #  1 2 3  PROVENIEN  Catalog #  1 2 3 4 5	Count  1 1 5 CCE NUM Count 1 1 1 1 1 14	Weight (in g)  13.10 3.90 9.90  BER: 414  Weight (in g) 0.80 0.30 3.60 26.00 25.50	plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m un Artifact Description  rhyolite shatter charcoal scraped body sherd, grog temper plain body sherd, fiber temper residual sherd	Ceramic Type untyped untyped nit, 10-20cmbd Ceramic Type untyped Stallings	
Catalog #  1 2 3  PROVENIEN  Catalog #  1 2 3 4 5  PROVENIEN	Count  1 1 5  VCE NUMI  Count 1 1 1 1 1 14	Weight (in g)  13.10 3.90 9.90  BER: 414  Weight (in g) 0.80 0.30 3.60 26.00 25.50  BER: 414	plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m under the shatter charcoal scraped body sherd, grog temper plain body sherd, fiber temper residual sherd  3 Excavation unit 414, level 3, 1x2 m under the shatter charcoal scraped body sherd, fiber temper residual sherd  5 Excavation unit 414, level 3, 1x2 m under the shatter charcoal scraped body sherd, fiber temper residual sherd	Ceramic Type untyped untyped nit, 10-20cmbd Ceramic Type  untyped Stallings nit, 20-30cmbd Ceramic Type	Comments
Catalog #  1 2 3  PROVENIEN Catalog #  1 2 3 4 5  PROVENIEN Catalog #	Count  1 1 5 CCE NUMI Count 1 1 1 14 CCE NUMI Count	Weight (in g)  13.10 3.90 9.90  BER: 414  Weight (in g) 0.80 0.30 3.60 26.00 25.50  BER: 414  Weight (in g)	Artifact Description  plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m un Artifact Description  rhyolite shatter charcoal scraped body sherd, grog temper plain body sherd, fiber temper residual sherd  3 Excavation unit 414, level 3, 1x2 m un Artifact Description	Ceramic Type untyped untyped nit, 10-20cmbd Ceramic Type  untyped Stallings nit, 20-30cmbd Ceramic Type untyped	Comments
Catalog #  1 2 3  PROVENIEN Catalog # 1 2 3 4 5  PROVENIEN Catalog # 1 1	Count  1 1 5 VCE NUMB  Count 1 1 1 1 1 CCE NUMB  COUNT 2	Weight (in g)  13.10 3.90 9.90  BER: 414  Weight (in g) 0.80 0.30 3.60 26.00 25.50  BER: 414  Weight (in g) 21.50 7.10	Plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m under the shatter charcoal scraped body sherd, grog temper plain body sherd, fiber temper residual sherd  3 Excavation unit 414, level 3, 1x2 m under the shatter charcoal scraped body sherd, fiber temper residual sherd  Artifact Description cord marked body sherd, grog temper plain rim sherd, fiber temper	Ceramic Type untyped untyped  nit, 10-20cmbd Ceramic Type  untyped Stallings  nit, 20-30cmbd Ceramic Type untyped Stallings	Comments
Catalog #  1 2 3  PROVENIEN Catalog # 1 2 3 4 5  PROVENIEN Catalog # 1 2 2	Count  1 1 5 CCE NUMI Count 1 1 14 CCE NUMI Count 2 1	Weight (in g)  13.10 3.90 9.90  BER: 414  Weight (in g) 0.80 0.30 3.60 26.00 25.50  BER: 414  Weight (in g) 21.50	plain body sherd, fine/medium sand temper plain body sherd, coarse sand temper residual sherd  2 Excavation unit 414, level 2, 1x2 m under the shatter charcoal scraped body sherd, grog temper plain body sherd, fiber temper residual sherd  3 Excavation unit 414, level 3, 1x2 m under the shatter charcoal scraped body sherd, fiber temper residual sherd  4 Artifact Description cord marked body sherd, grog temper	Ceramic Type untyped untyped nit, 10-20cmbd Ceramic Type  untyped Stallings nit, 20-30cmbd Ceramic Type untyped	Comments

Site Number	:	38BU1800			
PROVENIEN	ICE NUM	BER: 414	. 4 Excavation unit 414, level 4, 1x2 m un	nit, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	15.50	plain body sherd, fiber temper	Stallings	
2	2	4.30	residual sherd		
PROVENIEN	ICE NUM	BER: 414	. 5 Excavation unit 414, level 5, 1x2 m un	nit, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	16.00	plain body sherd, fiber temper	Stallings	
2	3	3.20	residual sherd		
PROVENIEN	ICE NUM	BER: 415	. 1 Excavation unit 415, level 1, 1x2 m un	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	8.10	plain rim sherd, fiber temper	Stallings	
2	1	2.80	punctate body sherd, fine/medium sand temper	untyped	
3	2	6.70	cord marked body sherd, very coarse sand temper	untyped	
4	5	12.20	residual sherd		
PROVENIEN	ICE NUM	BER: 415	. 2 Excavation unit 415, level 2, 1x2 m un	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.20	cord marked body sherd, fine/medium sand temper	untyped	
2	4	21.20	cord marked body sherd, very coarse sand temper	untyped	
3	2	11.20	plain rim sherd, fiber temper	Stallings	
4	1	0.10	Coastal Plain chert thinning flake		
5	8	18.80	residual sherd		
PROVENIEN	ICE NUM	BER: 415	. 3 Excavation unit 415, level 3, 1x2 m un	nit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	3.70	cord marked body sherd, grog temper	Wilmington	shell scraped interior
2	1	4.50	cord marked body sherd, very coarse sand temper	untyped	
3	1	0.90	Coastal Plain chert flake		
4	4	7.60	residual sherd		
PROVENIEN	ICE NUM	BER: 605	. 1 Excavation unit 403, feature 605, 1x2	m unit, 15cm below feature	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	62.50	Coastal Plain chert core fragment		
PROVENIEN	ICE NUM	BER: 605	. 101 Excavation unit 407, feature 605, East	half	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		1.40	flotation - light fraction		

Site Number	:	38BU1800			
2		1.10	residual, 1mil screen		
3		1.00	residual artifacts		
4		36.10	other shell		razor clam
5		14.60	residual shell		
6		0.20	charcoal		
PROVENIEN	ICE NUM	BER: 607	Excavation unit 413, feature 607, 1	x2m unit, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	39.90	plain rim sherd, fiber temper	Stallings	2 mend
2	3	60.90	plain body sherd, fiber temper	Stallings	
3	15	25.40	residual sherd		
4		188.80	faunal remains	intrusive Opossum	
PROVENIEN	ICE NUM	BER: 608	. 101 Excavation unit 414, feature 608, le	evel 2	_
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		24.70	flotation - light fraction		
2		5.30	residual, 1mil screen		
3		52.70	residual material		
4		81.30	periwinkle		
5	3	0.01	Coastal Plain chert thinning flake		
6		0.10	faunal remains		
7		4.40	residual shell		
8		1.70	charcoal		
PROVENIEN	ICE NUM	BER: 609	Excavation unit 414, feature 609, 1	x2m unit, North half	_
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	7	108.30	cord marked body sherd, grog temper	Wilmington	4 mend
2	2	7.10	eroded body sherd, grog temper	untyped	
PROVENIEN	ICE NUM	BER: 609	201 Excavation unit 414, feature 609, lo	evel 3, South half	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		176.50	flotation - light fraction		
2		24.80	residual, 1mil screen		
3		19.90	residual artifacts		
4		139.70	other shell		razor clam shell
5		451.90	oyster		
6		477.40	residual shell		
7		22.00	periwinkle		
8		4.00	charcoal		
9		0.10	faunal remains		
10		12.90	clam		
11		0.40	land snail		
12	8	6.60	residual sherd		

Site Number	<b>:</b>	38BU1800			
13	3	50.40	cord marked body sherd, grog temper	Wilmington	
14	1	19.40	cord marked rim sherd, grog temper	Wilmington	
LOCUS:		Cluster C			
PROVENIEN	CE NUME	BER: 402	. 1 Excavation unit 402, level 1, 1x2m uni	it, 0-10cmbd	_
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	4.50	residual sherd		
PROVENIEN	CE NUMI	BER: 402	• 2 Excavation unit 402, level 2, 1x2m uni	it, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	7.90	cord marked body sherd, very coarse sand temper	untyped	
2	1	4.40	curvilinear complicated stamped body sherd, coarse sand temper	Mississippian	
3	9	23.70	residual sherd		
PROVENIEN	CE NUMI	BER: 402	. 3 Excavation unit 402, level 3, 1x2m uni	it, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	167.20	plain rim sherd, fiber temper	Stallings	suspension hole in one, mend
2	1	4.50	cord marked body sherd, fine/medium sand temper	untyped	crosshatched
3	1	10.20	body sherd with unidentifiable decoration, grog temper	Wilmington	
4	2	19.50	plain body sherd, fiber temper	Stallings	
5	1	4.30	eroded body sherd, very coarse sand temper	untyped	
6		0.30	nut		shell fragment, not charred
7	1	1.00	Coastal Plain chert flake		
8	1	0.60	rhyolite shatter		
9	18	39.40	residual sherd		
10		3.50	charcoal		
PROVENIEN	CE NUMI	BER: 402	. 4 Excavation unit 402, level 4, 1x2m uni	it, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	16.10	plain rim sherd, fiber temper	Stallings	
2	1	16.00	eroded body sherd, coarse sand temper	untyped	scraped interior
3	1	3.70	punctate body sherd, fiber temper	Stallings	
4	7	12.60	residual sherd		
5	1	0.20	Coastal Plain chert flake fragment		
6	1	4.60	Coastal Plain chert projectile point mid- section		pink, heat treated, non diagnostic
PROVENIEN	CE NUMI	BER: 402	. 5 Excavation unit 402, level 5, 1x2m uni	it, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments

Site Number	r: 3	8BU1800			
1	4	38.50	plain body sherd, fiber temper	Stallings	2 mend
2	4	7.40	residual sherd		
PROVENIEN	NCE NUMB	ER: 402	. 6 Excavation unit 402, level 6, 1x2m uni	it, 50-60cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	1.60	residual sherd		
2	1	22.50	punctate body sherd, fiber temper	Stallings	
3	1	492.00	Coastal Plain chert cobble core		
PROVENIEN	NCE NUMB	ER: 403	. 1 Excavation unit 403, level 1, 1x2 m un	it, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	7.10	cord marked body sherd, coarse sand temper	untyped	
2	3	24.60	body sherd with unidentifiable decoration, coarse sand temper	untyped	
3	1	8.20	rim sherd with unidentifiable decoration, fine/medium sand temper	untyped	
4	7	15.90	residual sherd		1 rim
PROVENIEN	NCE NUMB	ER: 403	. 2 Excavation unit 403, level 2, 1x2 m un	it, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		0.10	charcoal		
2	1	6.20	curvilinear complicated stamped body sherd, coarse sand temper	Mississippian	
3	1	5.50	complicated stamped body sherd, fine/medium sand temper	Mississippian	
4	1	15.90	unidentified stamped body sherd, coarse sand temper	untyped	
5	1	3.50	cord marked body sherd, fine/medium sand temper	untyped	
6	3	19.40	cord marked body sherd, coarse sand temper	untyped	
7	23	49.10	residual sherd		2 rims
8	1	0.20	Coastal Plain chert thinning flake		
9	1	27.80	fabric impressed body sherd, coarse sand temper	Deptford	
PROVENIEN	NCE NUMB	ER: 403	. 3 Excavation unit 403, level 3, 1x2 m un	it, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	3	53.70	punctate body sherd, fiber temper	Stallings	all mend
2	2	3.50	residual sherd		
PROVENIEN	NCE NUMB	ER: 403	. 4 Excavation unit 403, level 4, 1x2 m un	it, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	4.00	plain body sherd, fiber temper	Stallings	
2	6	6.10	residual sherd	-	

Site Number	r:	38BU1800			
PROVENIEN	ICE NUMI	BER: 403	. 5 Excavation unit 403, level 5, 1x2 m un	nit, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	4	7.10	residual sherd	Stallings	
PROVENIEN	NCE NUMI	BER: 403	. 6 Excavation unit 403, level 6, 1x2 m un	nit, 50-60cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	1.20	petrified wood		
PROVENIEN	NCE NUMI	BER: 403	. 7 Excavation unit 403, level 7, 1x2 m un	nit, 60-70cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	1.20	Coastal Plain chert flake		hydrated
2	1	10.10	plain rim sherd, fiber temper	Stallings	
3	1	16.20	plain body sherd, fiber temper	Stallings	
PROVENIEN	NCE NUMI	BER: 403	. 8 Excavation unit 403, level 8, 1x2 m un	nit, 70-80cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		0.50	charcoal		
2	1	11.50	plain body sherd, fiber temper	Stallings	
3	3	5.00	residual sherd	Stallings	
PROVENIEN	NCE NUMI	BER: 403	. 9 Excavation unit 403, level 9, 1x2 m un	nit, 80-90-cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	4.80	plain body sherd, fiber temper	Stallings	
PROVENIEN	ICE NUMI	BER: 404	. 1 Excavation unit 404, level 1, 1x2 m un	nit, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.70	cord marked body sherd, coarse sand temper	untyped	
2	1	4.90	plain body sherd, coarse sand temper	untyped	
3	5	13.80	residual sherd		
4		6.50	faunal remains		
PROVENIEN	NCE NUMI	BER: 404	• 2 Excavation unit 404, level 2, 1x2 m un	nit, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		0.60	faunal remains		
2	1	6.40	plain body sherd, fine/medium sand temper	untyped	
3	4	53.60	cord marked body sherd, grog temper	Wilmington	
4	2	24.10	cord marked body sherd, very coarse sand temper	untyped	
		11.40	body sherd with unidentifiable decoration,	untyped	
5	1	11.10	grog temper		
5	18	40.70	grog temper residual sherd		

Site Number	3	88BU1800			
PROVENIEN	ICE NUMB	ER: 404	Excavation unit 404, level 3, 1x2 m un	it, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	8	109.60	cord marked body sherd, fine/medium temper	Savannah	
2	1	9.40	cord marked body sherd, very coarse sand temper	untyped	
3	1	18.10	cord marked rim sherd, grog temper	Wilmington	cord marked interio
4	1	12.40	plain body sherd, fiber temper	Stallings	
5	1	10.00	punctate body sherd, fiber temper	Stallings	
6	20	37.60	residual sherd		
7	2	17.30	fabric impressed body sherd, grog temper	Wilmington	
PROVENIEN	ICE NUMB	ER: 404	Excavation unit 404, level 4, 1x2 m un	it, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2	22.40	cord marked body sherd, grog temper	Wilmington	
2	1	1.20	residual sherd		
PROVENIEN	ICE NUMB	ER: 406	Excavation unit 406, level 1, 1x2 m un	it, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	2.40	residual sherd		
PROVENIEN	ICE NUMB	ER: 406	Excavation unit 406, level 2, 1x2 m un	it, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	20	31.10	residual sherd		
2	1	6.10	eroded body sherd, grog temper	untyped	
3	1	6.30	cord marked body sherd, grog temper	Wilmington	
4	1	5.10	cob impressed body sherd, fine/medium sand temper	Irene, Shell Crescent Variant	
PROVENIEN	ICE NUMB	ER: 406	Excavation unit 406, level 3, 1x2 m un	it, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	23.50	cord marked rim sherd, very coarse sand temper	Deptford	
2	3	13.20	cord marked body sherd, fine/medium sand temper	untyped	2 mend
3	1	4.40	random incised rim sherd, coarse sand temper	untyped	
4	1	1.00	punctate rim sherd, coarse sand temper	untyped	
5	1	10.90	plain rim sherd, fiber temper	Stallings	
6	5	28.00	plain body sherd, fiber temper	Stallings	
7	1	2.50	residual sherd		
PROVENIEN	ICE NUMB	ER: 406	Excavation unit 406, level 4, 1x2 m un	it, 30-40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
4	4	22.10	plain body sherd, fiber temper	Stallings	
1	•				

Site Number	r:	38BU1800			
3		2.10	faunal remains		
PROVENIE	NCE NUM	BER: 406	. 5 Excavation unit 406, level 5, 1x2 m un	it, 40-50cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	12.50	punctate rim sherd, fiber temper	Stallings	
2	1	9.90	plain body sherd, fiber temper	Stallings	
3	4	5.30	residual sherd		
PROVENIE	NCE NUM	BER: 406	. 6 Excavation unit 406, level 6, 1x2 m un	it, 50-60cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	6.60	plain rim sherd, fiber temper	Stallings	
PROVENIE	NCE NUM	BER: 408	. 1 Excavation unit 408, level 1, 1x2 m un	it, 0-10cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	5	10.30	residual sherd		
2		3.50	faunal remains		
3		3.50	unglazed brick fragments		
PROVENIE	NCE NUM	BER: 408	. 2 Excavation unit 408, level 2, 1x2 m un	it, 10-20cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	4	27.60	cord marked body sherd, grog temper	Wilmington	
2	1	2.70	cord marked rim sherd, grog temper	Wilmington	
3	2	3.00	residual sherd		
PROVENIE	NCE NUM	BER: 408	. 3 Excavation unit 408, level 3, 1x2 m un	it, 20-30cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	2		random incised body sherd, fiber temper	Stallings	mend
		8.60			mena
2	1	8.60 4.50	cord marked body sherd, grog temper	Wilmington	menu
2 3	1 1		•		mend
		4.50	cord marked body sherd, grog temper	Wilmington	incid
3	1	4.50 2.70	cord marked body sherd, grog temper cord marked body sherd, coarse sand temper	Wilmington untyped	incid
3 4 5	1 1 1	4.50 2.70 4.00 9.00	cord marked body sherd, grog temper cord marked body sherd, coarse sand temper eroded body sherd, fine/medium sand temper body sherd with unidentifiable decoration, very coarse sand temper	Wilmington untyped untyped untyped	incid
3 4 5	1 1 1	4.50 2.70 4.00 9.00	cord marked body sherd, grog temper cord marked body sherd, coarse sand temper eroded body sherd, fine/medium sand temper body sherd with unidentifiable decoration, very coarse sand temper	Wilmington untyped untyped untyped	Comments
3 4 5	1 1 1 NCE NUM	4.50 2.70 4.00 9.00 BER: 408	cord marked body sherd, grog temper cord marked body sherd, coarse sand temper eroded body sherd, fine/medium sand temper body sherd with unidentifiable decoration, very coarse sand temper  . 4 Excavation unit 408, level 4, 1x2 m un	Wilmington untyped untyped untyped	
3 4 5 PROVENIEN Catalog #	1 1 1 NCE NUM Count	4.50 2.70 4.00 9.00 BER: 408 Weight (in g)	cord marked body sherd, grog temper cord marked body sherd, coarse sand temper eroded body sherd, fine/medium sand temper body sherd with unidentifiable decoration, very coarse sand temper  4 Excavation unit 408, level 4, 1x2 m un Artifact Description	Wilmington untyped untyped untyped it, 30-40cmbd Ceramic Type	
3 4 5  PROVENIEN Catalog #	1 1 1 NCE NUM Count	4.50 2.70 4.00 9.00 BER: 408 Weight (in g) 36.10	cord marked body sherd, grog temper cord marked body sherd, coarse sand temper eroded body sherd, fine/medium sand temper body sherd with unidentifiable decoration, very coarse sand temper  4 Excavation unit 408, level 4, 1x2 m un Artifact Description plain rim sherd, fiber temper	Wilmington untyped untyped untyped it, 30-40cmbd Ceramic Type	
3 4 5  PROVENIEN  Catalog # 1 2	1 1 1 NCE NUM Count 1	4.50 2.70 4.00 9.00 BER: 408 Weight (in g) 36.10 1.20 16.40	cord marked body sherd, grog temper cord marked body sherd, coarse sand temper eroded body sherd, fine/medium sand temper body sherd with unidentifiable decoration, very coarse sand temper  . 4 Excavation unit 408, level 4, 1x2 m un  Artifact Description plain rim sherd, fiber temper scallop whelk	Wilmington untyped untyped untyped it, 30-40cmbd Ceramic Type Stallings	Comments
3 4 5 PROVENIEN Catalog # 1 2 3	1 1 1 NCE NUM Count 1	4.50 2.70 4.00 9.00 BER: 408 Weight (in g) 36.10 1.20 16.40	cord marked body sherd, grog temper cord marked body sherd, coarse sand temper eroded body sherd, fine/medium sand temper body sherd with unidentifiable decoration, very coarse sand temper  . 4 Excavation unit 408, level 4, 1x2 m un  Artifact Description plain rim sherd, fiber temper scallop whelk	Wilmington untyped untyped untyped it, 30-40cmbd Ceramic Type Stallings	Comments
3 4 5  PROVENIEN Catalog # 1 2 3  PROVENIEN	1 1 1 VCE NUM Count 1	4.50 2.70 4.00 9.00 BER: 408 Weight (in g) 36.10 1.20 16.40 BER: 408	cord marked body sherd, grog temper cord marked body sherd, coarse sand temper eroded body sherd, fine/medium sand temper body sherd with unidentifiable decoration, very coarse sand temper  . 4 Excavation unit 408, level 4, 1x2 m un  Artifact Description  plain rim sherd, fiber temper scallop whelk  . 5 Excavation unit 408, level 5, 1x2 m un	Wilmington untyped untyped untyped iit, 30-40cmbd Ceramic Type Stallings	<i>Comments</i> columella

Site Number	:: 	38BU1800			
PROVENIEN	ICE NUMI	BER: 602	Excavation unit 402, feature 602, sho	erd cluster, 40cmbd	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	5	52.00	plain body sherd, fiber temper	Stallings	
PROVENIEN	ICE NUMI	BER: 603	Excavation unit 402, feature 603, No.	orth half	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	3.40	residual sherd		
PROVENIEN	ICE NUMI	BER: 603	• 101 Feature 603, North half, upper 20 cm	n, flotation	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		101.50	other shell		
2		0.60	charcoal		
3		0.50	residual, 2 mil screen		
4		477.10	oyster		
5		3.90	residual, 1mil screen		
6		8.30	residual artifacts		
7		13.60	flotation - light fraction		
PROVENIEN	ICE NUMI	BER: 603	. 201 Feature 603, North half, lower 30 cm	n, flotation	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		10.30	flotation - light fraction		
2		2.50	residual, 1mil screen		
3		12.30	clam		razor clam
4		0.10	charcoal		
5		648.00	oyster		
6		7.60	residual artifacts		
PROVENIEN	ICE NUMI	BER: 604	Excavation unit 404, feature 604, 1x	2 m unit, West half	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1	1	19.70	random incised rim sherd, fiber temper	Stallings	
2	5	106.10	random incised body sherd, fiber temper	Stallings	
3	1	4.90	plain body sherd, coarse sand temper	untyped	
4	3	0.70	residual sherd		
PROVENIEN	ICE NUMI	BER: 604	. 101 Excavation unit 404/408, feature 604	4, East half, flotation	
Catalog #	Count	Weight (in g)	Artifact Description	Ceramic Type	Comments
1		58.80	flotation - light fraction		
2		5.40	residual, 1mil screen		
3		19.40	residual artifacts		
4		150.50	oyster		
5		11.90	residual shell		
6		2.60	charcoal		

Site Number:	38BU1800	
7	1	residual sherd

Appendix B.
Minimum Vessel Analysis Forms

All measurements in mm. Vessel Number: Site Number: 38BU1800 Provenience/Catalog Number: ✓ Body Rim 416.3:4 Decoration: Cord marked Type Name: Wilmington 8% Number of Sherds: 21 Percentage of Vessel: Aplastic Type: grog granular Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 200 Aplastic Density: <1 Paste Texture: sugary Core Configuration: black to orange Dark Core Retention: 25% Rim Diameter: Rim Shape: Rim Production Step: Thickness: Firing Atmosphere: ✓ Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: exterior ✓ Coil Breaks Inferred Vessel Form: conical bowl Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Punctate Cord Marked Complicated Stamped** Width: 1.4 Location: Type: Spacing: 0.6 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Measurements: Parallel or V-shaped: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Some shell scraping on interior. Base sherds. Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: 419.1:1(2) Prov/Cat: Prov/Cat: 416.3:4(11) Prov/Cat: 416.4:4(1) Prov/Cat: Prov/Cat: Prov/Cat: 416.2:6(4) 416.2:5(1) Prov/Cat: Prov/Cat: Prov/Cat: 419.3:5(1) 416.1:2(1)

All measurements in mm. 2 Vessel Number: Site Number: 38BU1800 Provenience/Catalog Number: 609.201:14 ☐ Body ✓ Rim Decoration: Cord marked Type Name: Wilmington 4% Number of Sherds: Percentage of Vessel: 11 Aplastic Type: grog Aplastic Size: medium Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 40 Aplastic Density: 2 Paste Texture: dense Core Configuration: mottled Dark Core Retention: 25% Rim Shape: Rim Diameter: round 44 Rim Production Step: smoothed Thickness: 0.87 Firing Atmosphere: ✓ Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior/exterior Coil Breaks Inferred Vessel Form: conical bowl Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 1 Location: Type: Spacing: Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Measurements: Parallel or V-shaped: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Some shell scraping on interior. Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 609.201:14(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 609.1:1(7) Prov/Cat: Prov/Cat: 609.201:13(3) Prov/Cat:

All measurements in mm. Vessel Number: 3 Site Number: 38BU1800 Provenience/Catalog Number: 404.3:3 ☐ Body ✓ Rim Decoration: Cord marked Type Name: Wilmington 4% Number of Sherds: Percentage of Vessel: 18 Aplastic Type: grog Aplastic Size: medium Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 32 Aplastic Density: 3 Paste Texture: sugary Core Configuration: mottled Dark Core Retention: 25% Rim Shape: Rim Diameter: round 52 Rim Production Step: notched Thickness: 0.81 Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: exterior ✓ Coil Breaks Inferred Vessel Form: conical bowl Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 1.1 Location: Type: Spacing: 4 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Measurements: Parallel or V-shaped: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Some cord marking on interior near rim. Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: 408.3:2(1) Prov/Cat: 415.3:1(1) Prov/Cat: 404.3:3(1) Prov/Cat: 404.3:1(5) Prov/Cat: Prov/Cat: Prov/Cat: 419.2:2(1) 404.2:3(3) Prov/Cat: Prov/Cat: 408.2:1(4) Prov/Cat: 404.4:1(2)

Vessel Number:	4	All mea	surements in mm.	Site N	lumber:	38BU1	800
Provenience/Catalog I	Number:	9.1:4			Body	<b>✓</b> Rim	
Decoration: Cord m	arked		Type Nam	ie: Wilmington	ı		
Percentage of Vessel:	2%	, o	Number o	f Sherds:	2		
Aplastic Type: grog Aplastic Size: granula Aplastic Shape: Aplastic Density: 2 Core Configuration: black to				Density: 40 xture: sugary e Retention:	60%		
Rim Shape: round Rim Production Step: sm	oothed		Rim Dian Thicknes		).74		
Firing Atmosphere:  Sooting Sooting Fire Clouding Fire Clouding Fire Clouding Fire Clouding Southed Interior Surface Treatment:	Placement: ding Placeme smoothed	nt:		nping: moderate /Base Form: /essel Form: bow			
Use Wear:	Sillootiica		Type of Wear:				
Complicated Stamped		Cord Marked		Punctate			
Type: Number of Lines: Size:	0	Width: Spacing: S/Z Twist:	1.4 1.9 z	Location: Shape:			
Check Stamped			Simple Stamped	_			
Check Stamp Size: Measurements: Shape: Even/Uneven:			Width of Lands: Parallel or V-shape Direction: Widthof Grooves:		0 0	0	
Incised				Fabric Impre	essed	-	
Measurements: 0  Rim Fold Width:	0 0	Slipped/Filme Color: Location:	ed_	Warp to Warp Width: Weft Width: Warp Spacin	p:	0 0 0 0 0 0	0 0 0
Additional Comments: S	hell scraped i	nterior.			,		
Provenience/Catalog (Cou	nt) of all she	rds attributed to	o vessel.	Prov/Cat:			
Prov/Cat: 9.1:3(1) Prov/Cat: 9.1:4(1)		Prov/Cat: Prov/Cat:		Prov/Cat: Prov/Cat:			
Prov/Cat: 9.1.4(1)		Prov/Cat:		Prov/Cat:			

All measurements in mm. Vessel Number: 5 Site Number: 38BU1800 Provenience/Catalog Number: 404.3:1 ✓ Body  $\square$  Rim Decoration: Fine Cord Marked Type Name: Savannah 1% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: sand Aplastic Size: medium Minority Aplastic: c sand Aplastic Shape: subround Minority Density: 12 Aplastic Density: 40 Paste Texture: dense Core Configuration: brown to tan Dark Core Retention: 0% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: exterior Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 1.2 Location: Type: Spacing: 0.9 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Thin vessel. Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 404.3:1(2) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

Vessel Number:	6	All mea	isurements in mm.		Site Nu	ımber:	38	3BU18	300
Provenience/Catalog N	lumber:	9.1:2			<b>✓</b> B	ody	□ F	Rim	
Decoration: Cord ma	arked		Type Nam	ie: Wilm	nington				
Percentage of Vessel:	1%	6	Number o	f Sherds:		3			
Aplastic Type: grog Aplastic Size: granula Aplastic Shape: Aplastic Density: 5 Core Configuration: black to Rim Shape: Rim Production Step:			Minority A Minority I Paste Te Dark Cor Rim Dian Thicknes	Density: 3 xture: 5 e Retention:	i/m sand 30 sugary	90%			
Firing Atmosphere:  Sooting Sooting P Fire Clouding Fire Cloud Coil Breaks Smoothed Interior Surface Treatment: Use Wear:				nping: r /Base Form /essel Form					
Complicated Stamped		Cord Marked	_	Punctate					
Type: Number of Lines: Size:	0	Width: Spacing: S/Z Twist:	2.6 1.2 z	Location: Shape:					
Check Stamped Check Stamp Size: Measurements: Shape: Even/Uneven:			Simple Stamped Width of Lands: Parallel or V-shape Direction: Widthof Grooves:	- 0 ed:	0	(	0	0	
Incised				Fabr	ic Impres	sed			
Measurements: 0  Rim Fold Width:  Additional Comments:	0 0	Slipped/Filme Color: Location:	ed_	Warp Weft Warp	o to Warp:  Width:  Width:  Spacing:  Spacing:		0 0 0	0 0 0	0 0 0
Additional Comments.									
Provenience/Catalog (Cour Prov/Cat: 9.1:2(3) Prov/Cat: Prov/Cat:	į	rds attributed t Prov/Cat: Prov/Cat: Prov/Cat:	o vessel.	Prov/Ca Prov/Ca Prov/Ca Prov/Ca	t: t:				

All measurements in mm. 7 Vessel Number: Site Number: 38BU1800 Provenience/Catalog Number: 417.3:4 ✓ Body  $\square$  Rim Decoration: Fine Cord Marked Type Name: Savannah 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: medium Minority Aplastic: Aplastic Shape: round Minority Density: Aplastic Density: 60 Paste Texture: sugary Core Configuration: black to orange Dark Core Retention: 15% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: ✓ Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: burnished Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 8.0 Location: Type: Spacing: 1.1 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 417.3:4(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

Vessel Number:	8	All meas	surements in mm.	;	Site Numb	er: 3	38BU18	300
Provenience/Catalog Nu	mber: 9	9.1:3			<b>✓</b> Body	,	Rim	
Decoration: Cord mar	ked		Type Name	e: Wilmi	ngton			
Percentage of Vessel:	5%		Number of	Sherds:	3			
Aplastic Type: grog Aplastic Size: medium Aplastic Shape: Aplastic Density: 12 Core Configuration: black to n Rim Shape:	nottled to ora	ange	Rim Diame	ensity: 32 ture: de Retention: eter:	n sand ? ense 35 %	<b>%</b>		
Rim Production Step:			Thickness	:				
Firing Atmosphere:  Sooting Sooting Plar  Fire Clouding Fire Cloudin  Coil Breaks  Smoothed  Interior Surface Treatment:				oing: m Base Form: essel Form:	oderate			
Use Wear:		T	Type of Wear:					
Complicated Stamped		Cord Marked		Punctate				
Type: Number of Lines: Size:	0	Width: Spacing: S/Z Twist:	1.5 1.5 z	Location: Shape:				
Check Stamped			Simple Stamped					
Check Stamp Size: Measurements: Shape: Even/Uneven:			Width of Lands: Parallel or V-shaped Direction: Widthof Grooves:	0 d:	0	0	0	
Incised				Fabrio	Impressed			
Measurements: 0	0 0	Color: Location:	<u>i</u>	Warp \\ Weft V Warp \		0 0 0	0 0 0	0 0 0
, tadational Commonts.								
Provenience/Catalog (Count)	of all shere	ds attributed to	vessel.	Prov/Cat:				
Prov/Cat: 9.1:3(2) Prov/Cat: 416.2:6(1) Prov/Cat:	Pi	rov/Cat: rov/Cat: rov/Cat:		Prov/Cat: Prov/Cat: Prov/Cat:				

All measurements in mm. Vessel Number: 9 Site Number: 38BU1800 Provenience/Catalog Number: ☐ Body ✓ Rim 24.1:1 Decoration: Cord Marked Type Name: Deptford 5% Number of Sherds: Percentage of Vessel: 6 Aplastic Type: sand Aplastic Size: granular Minority Aplastic: c sand Aplastic Shape: subround Minority Density: 20 Aplastic Density: 12 Paste Texture: dense Core Configuration: tan to orange/black Dark Core Retention: 5% Rim Shape: Rim Diameter: round Rim Production Step: smoothed 0.86 Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: exterior ✓ Coil Breaks Inferred Vessel Form: iar Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 1.5 Location: Type: Spacing: 2 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Measurements: Parallel or V-shaped: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Some shell scraping on exterior below rim. Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 24.1:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 411.2:4(4) Prov/Cat: Prov/Cat: 412.2:2(1) Prov/Cat:

Vessel Number: 10	All measurements in mm.	Site Number	r: 38BU1	1800
Provenience/Catalog Number: 9	9.1:4	$\square$ Body	<b>✓</b> Rim	
Decoration: Cord marked	Type Na	ame: Wilmington		
Percentage of Vessel: 1 %	Number Number	of Sherds: 2		
Aplastic Type: grog Aplastic Size: granular Aplastic Shape: Aplastic Density: 2 Core Configuration: black to grey Rim Shape: round Rim Production Step: notched	Minorii Paste Dark C	ty Aplastic: c sand ty Density: 5  Texture: sugary Core Retention: 50 % tiameter: 20 tess:		
Firing Atmosphere:  Sooting Sooting Placement:  Fire Clouding Fire Clouding Placemer  Coil Breaks  Smoothed  Interior Surface Treatment: smoothed	nt: Should	tamping: none der/Base Form: d Vessel Form: bowl		
Use Wear:	Type of Wear:			
Complicated Stamped	Cord Marked	Punctate		
Type: Number of Lines: 0 Size:	Width: 1.5 Spacing: 1.5 S/Z Twist: z	Location: Shape:		
Check Stamped	Simple Stampe	ed_		
Check Stamp Size: Measurements: Shape: Even/Uneven:	Width of Lands: Parallel or V-sha Direction: Widthof Groove	aped:	0 0	
Incised		Fabric Impressed	_	
Measurements: 0 0 0  Rim Fold Width: 0	Color: Location:	Warp to Warp: Warp Width: Weft Width: Warp Spacing: Weft Spacing:	0 0 0 0 0 0	0 0 0
Additional Comments: Cord markings of	on interior near rim.			
Provenience/Catalog (Count) of all sher	rds attributed to vessel.	Prov/Cat:		
Prov/Cat: 9.1:4(1) Prov/Cat: 408.2:2(1) P	Prov/Cat: Prov/Cat: Prov/Cat:	Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:		

All measurements in mm. Vessel Number: 11 Site Number: 38BU1800 Provenience/Catalog Number: 406.3:1 ☐ Body ✓ Rim Decoration: Cord Marked Type Name: Deptford 1% Number of Sherds: Percentage of Vessel: 1 sand Aplastic Type: Aplastic Size: Minority Aplastic: very coarse c sand Aplastic Shape: round Minority Density: Aplastic Density: 2 Paste Texture: dense Core Configuration: black to grey Dark Core Retention: 40% Rim Shape: Rim Diameter: round Rim Production Step: smoothed 0.95 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: iar Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 1 Location: Type: Spacing: 2.1 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Shell scraping on interior. Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 406.3:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

Vessel Number: 12	All measurements in mm	Site Number: 38BU1800
Provenience/Catalog Number:	407.2:2	☐ Body <b>☑</b> Rim
Decoration: Fine Cord Marke	d Type Na	ame: Savannah
Percentage of Vessel: 1	% Number	r of Sherds: 1
Aplastic Type: sand Aplastic Size: medium Aplastic Shape: subround Aplastic Density: 60 Core Configuration: black to grey	Minori Paste	ty Aplastic: none ty Density: Texture: sugary Core Retention: 90%
Rim Shape: round Rim Production Step: stamped	Rim D Thickr	iameter: ness: 0
Firing Atmosphere:  Sooting Sooting Placement:  Fire Clouding Fire Clouding Placem  Coil Breaks  Smoothed Interior Surface Treatment: burnished Use Wear:	nent: Should Inferre	tamping: moderate der/Base Form: ed Vessel Form:
Complicated Stamped	Cord Marked	Punctate
Type: Number of Lines: 0 Size:	Width: 1 Spacing: 2.2 S/Z Twist: z	Location: Shape:
Check Stamped Check Stamp Size: Measurements: Shape: Even/Uneven:	Simple Stampe Width of Lands: Parallel or V-sh Direction: Widthof Groove	0 0 0 aped:
Incised		Fabric Impressed
Measurements: 0 0 0  Rim Fold Width: 0	Slipped/Filmed  Color: Location:	Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 0 Weft Width: 0 0 0 0 Warp Spacing:
		Weft Spacing:
Additional Comments:		
Provenience/Catalog (Count) of all sh	nerds attributed to vessel.	Prov/Cat:
Prov/Cat: 407.2:2(1) Prov/Cat: Prov/Cat:	Prov/Cat: Prov/Cat: Prov/Cat:	Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 13 Site Number: 38BU1800 Provenience/Catalog Number: 405.3:5 ✓ Body  $\square$  Rim Decoration: Random incised Type Name: Refuge 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: Minority Aplastic: coarse f/m sand Aplastic Shape: round Minority Density: 20 Aplastic Density: 8 Paste Texture: dense Core Configuration: dark brown to orange Dark Core Retention: 30% Rim Shape: Rim Diameter: Rim Production Step: Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 405.3:5(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 14 Site Number: 38BU1800 Provenience/Catalog Number: 407.2:7 ✓ Body  $\square$  Rim Decoration: Fabric impressed Type Name: Wilmington 2% Number of Sherds: 3 Percentage of Vessel: Aplastic Type: grog granular Aplastic Size: Minority Aplastic: Aplastic Shape: Minority Density: Aplastic Density: Paste Texture: dense Core Configuration: black Dark Core Retention: 100% Rim Shape: Rim Diameter: Rim Production Step: Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: exterior Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: uneven Rim Fold Width: 0 Weft Spacing: loose Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 404.2:7(2) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 404.3:7(1) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 15 Site Number: 38BU1800 Provenience/Catalog Number: 404.3:7 ✓ Body  $\square$  Rim Decoration: Fabric impressed Type Name: Wilmington 1% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: grog Aplastic Size: granular Minority Aplastic: none Aplastic Shape: Minority Density: Aplastic Density: Paste Texture: dense Core Configuration: grey/brown Dark Core Retention: 0% Rim Shape: Rim Diameter: Rim Production Step: Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior/exterior Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: uneven Rim Fold Width: 0 Weft Spacing: loose Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 404.3:7(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 417.3:6(1) Prov/Cat: Prov/Cat: Prov/Cat:

Vessel Number:	16	All meas	urements in mm.		Site Num	ber: 38	3BU18	300
Provenience/Catalog Nu	ımber: 4	416.2:3			<b>✓</b> Bod	у 🗆 Б	Rim	
Decoration: Fabric Im	pressel		Type Name	e: Missi	ssippian			
Percentage of Vessel:	1%	•	Number of	Sherds:	1			
Aplastic Type: sand Aplastic Size: medium Aplastic Shape: subround Aplastic Density: 40 Core Configuration: black to d Rim Shape: Rim Production Step:			Minority Ap Minority De Paste Text Dark Core Rim Diame Thickness:	ensity: 2i ure: si Retention: eter:	m sand 0 ugary 50	%		
Firing Atmosphere:  Sooting Sooting Pla Fire Clouding Fire Cloudin Coil Breaks Smoothed Interior Surface Treatment: Use Wear:			Overstamp Shoulder/B Inferred Ve Type of Wear:	sase Form:				
		Cord Marked	•	Punctate				
Type: Number of Lines: Size:	0	Width: Spacing: S/Z Twist:		Location: Shape:				
Check Stamped Check Stamp Size: Measurements: Shape: Even/Uneven:			Simple Stamped Width of Lands: Parallel or V-shaped Direction: Widthof Grooves:	0 I:	0	0	0	
Incised  Measurements: 0	0 0	Slipped/Filmed	<u>1</u>	Warp Warp	to Warp: Width:	0	0 0	0
Rim Fold Width:	0	Location:			Width: Spacing: Spacing:	0 parallel loose	0	0
Additional Comments:								
Provenience/Catalog (Count	) of all sher	ds attributed to	vessel.	Prov/Cat:				
Prov/Cat: 416.2:3(1) Prov/Cat: Prov/Cat:	Р	rov/Cat: rov/Cat: rov/Cat:		Prov/Cat: Prov/Cat: Prov/Cat:				

All measurements in mm. Vessel Number: 17 Site Number: 38BU1800 Provenience/Catalog Number: 403.2:9 ✓ Body  $\square$  Rim Decoration: Fabric Impressed Type Name: Deptford 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: Minority Aplastic: very coarse c sand Aplastic Shape: subround Minority Density: 20 Aplastic Density: Paste Texture: dense Core Configuration: black to brown to orange/pink Dark Core Retention: 10% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Shoulder/Base Form: Fire Clouding Fire Clouding Placement: Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: uneven Rim Fold Width: 0 Weft Spacing: loose Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 403.2:9(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 18 Site Number: 38BU1800 Provenience/Catalog Number: 13.1:2 ✓ Body  $\square$  Rim Decoration: Cob Impressed Type Name: Irene SCV 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: Minority Aplastic: fine vc sand Aplastic Shape: subround Minority Density: 2 Aplastic Density: 40 Paste Texture: sugary Core Configuration: orange Dark Core Retention: 0% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Shoulder/Base Form: Fire Clouding Fire Clouding Placement: interior Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: parallel Warp Spacing: Rim Fold Width: 0 Weft Spacing: tight Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 13.1:2(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

Vessel Number: 19	All measurements in mm.	Site Number: 38BU1800
Provenience/Catalog Number:	18.1:4	☐ Body ☑ Rim
Decoration: Fabric Impressed	Type Nam	e: Deptford
Percentage of Vessel: 1 %	% Number of	Sherds: 1
Aplastic Type: sand Aplastic Size: fine Aplastic Shape: round Aplastic Density: 40 Core Configuration: dark brown	Minority A Minority D Paste Tex Dark Core	Density:
Rim Shape: round Rim Production Step: stamped	Rim Diam Thickness	
Firing Atmosphere:  Sooting Sooting Placement:  Fire Clouding Fire Clouding Placement:  Coil Breaks  Smoothed  Interior Surface Treatment: well smoothed	Inferred V	ping: Base Form: essel Form: jar
Use Wear:	Type of Wear:	
Complicated Stamped	Cord Marked	Punctate
Type: Number of Lines: 0 Size:	Width: 0 Spacing: 0 S/Z Twist:	Location: Shape:
Check Stamped	Simple Stamped	
Check Stamp Size: Measurements: Shape: Even/Uneven:	Width of Lands: Parallel or V-shape Direction: Widthof Grooves:	0 0 0 d:
Instant		Fabric Impressed
Incised  Measurements: 0 0 0	Slipped/Filmed  Color: Location:	Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 0 0
Rim Fold Width: 0		Warp Spacing: parallel Weft Spacing: tight
Additional Comments:		
Provenience/Catalog (Count) of all she	erds attributed to vessel.	Prov/Cat:
Prov/Cat: 18.1:4(1)	Prov/Cat:	Prov/Cat:
Prov/Cat:	Prov/Cat:	Prov/Cat:
Prov/Cat: F	Prov/Cat:	Prov/Cat:

All measurements in mm. Vessel Number: 20 Site Number: 38BU1800 Provenience/Catalog Number: ☐ Body ✓ Rim 6.1:3 Decoration: **Diamond Check Stamped** Type Name: Irene SCV 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: Minority Aplastic: coarse Aplastic Shape: subround Minority Density: Aplastic Density: 10 Paste Texture: dense Core Configuration: brown to orange Dark Core Retention: 0% Rim Shape: Rim Diameter: round Rim Production Step: smoothed to exterior 0 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: fine Width of Lands: 0 0 0 Measurements: 3.1 x 3. 3.5 x 2. 2.8 x 2. Parallel or V-shaped: Shape: diamond Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 0 Warp to Warp: 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 6.1:3(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 21 Site Number: 38BU1800 Provenience/Catalog Number: 407.2:1 ✓ Body  $\square$  Rim Decoration: Cob Impressed Type Name: Irene SCV 1% Number of Sherds: 3 Percentage of Vessel: Aplastic Type: sand Aplastic Size: Minority Aplastic: fine none Aplastic Shape: subround Minority Density: Aplastic Density: 80 Paste Texture: sugary Core Configuration: black Dark Core Retention: 100% Rim Shape: Rim Diameter: 14 Rim Production Step: Thickness: 0 Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: moderate ✓ Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior/exterior ✓ Coil Breaks Inferred Vessel Form: ✓ Smoothed Interior Surface Treatment: slipped Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: fine Width of Lands: 0 0 0 Measurements: 3.0 x 3. 2.7 x 2. 3.1 x 3. Parallel or V-shaped: Shape: Direction: square Even/Uneven: uneven Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 407.2:1(3) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. 22 Vessel Number: Site Number: 38BU1800 Provenience/Catalog Number: 405.3:4 ✓ Body  $\square$  Rim Decoration: Linear Check Stamped Type Name: Deptford 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: medium Minority Aplastic: c sand Aplastic Shape: subround Minority Density: 10 Aplastic Density: 60 Paste Texture: dense Core Configuration: black to brown to orange Dark Core Retention: 40% Rim Shape: Rim Diameter: Rim Production Step: Thickness: 0 Firing Atmosphere: Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: ✓ Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: medium Width of Lands: 0 0 0 Measurements: 4.4 x 4. 3.0 x 5. 3.4 x 4. Parallel or V-shaped: Shape: Direction: square Even/Uneven: uneven Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 405.3:4(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 23 Site Number: 38BU1800 Provenience/Catalog Number: ✓ Body  $\square$  Rim 418.2:1 Decoration: Linear Check Stamped Type Name: Deptford 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: medium Minority Aplastic: c sand Aplastic Shape: round Minority Density: Aplastic Density: 80 Paste Texture: sugary Core Configuration: dark grey to brown Dark Core Retention: 0% Rim Shape: Rim Diameter: Rim Production Step: Thickness: 0 Firing Atmosphere: Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: medium Width of Lands: 0 0 0 Measurements: 2.5 x 4. 3.9 x 4. 2.9 x 4. Parallel or V-shaped: Shape: Direction: rectangle Even/Uneven: uneven Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 418.2:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 24 Site Number: 38BU1800 Provenience/Catalog Number: 410.3:1 □ Body ✓ Rim Decoration: Simple stamped Type Name: Refuge 4% Number of Sherds: 9 Percentage of Vessel: Aplastic Type: sand Aplastic Size: Minority Aplastic: coarse vc sand Aplastic Shape: subround Minority Density: 2 Aplastic Density: 80 Paste Texture: dense Core Configuration: black to orange/tan Dark Core Retention: 50% Rim Shape: Rim Diameter: round 28 Rim Production Step: smoothed Thickness: 0.88 Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior ✓ Coil Breaks Inferred Vessel Form: iar Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 2.7 3.4 3.3 Measurements: Parallel or V-shaped: parallel Shape: Direction: right Even/Uneven: Widthof Grooves: 2.4 1.5 2.7 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 410.3:1(2) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 410.3:2(1) Prov/Cat: Prov/Cat: 405.3:6(6) Prov/Cat:

All measurements in mm. Vessel Number: 25 Site Number: 38BU1800 Provenience/Catalog Number: 401.3:3 □ Body ✓ Rim Decoration: Simple stamped Type Name: Refuge 4% Number of Sherds: 5 Percentage of Vessel: Aplastic Type: sand Aplastic Size: Minority Aplastic: coarse vc sand Aplastic Shape: subround Minority Density: Aplastic Density: 40 Paste Texture: dense Core Configuration: black to brown to orange Dark Core Retention: 40% Rim Shape: Rim Diameter: flat 36 Rim Production Step: stamped Thickness: 0.83 Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior/exterior ✓ Coil Breaks Inferred Vessel Form: iar Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 1.8 3 2.3 Measurements: Parallel or V-shaped: parallel Shape: Direction: left Even/Uneven: Widthof Grooves: 2.7 1.9 1.6 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 401.3:3(1) Prov/Cat: 401.3:2(1) Prov/Cat: Prov/Cat: Prov/Cat: 401.4:2(2) Prov/Cat: Prov/Cat: 405.3:6(1) Prov/Cat:

All measurements in mm. Vessel Number: 26 Site Number: 38BU1800 Provenience/Catalog Number: 419.3:4 ☐ Body ✓ Rim Decoration: Simple stamped Type Name: Refuge 2% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: sand Aplastic Size: Minority Aplastic: fine c sand Aplastic Shape: Minority Density: round Aplastic Density: 80 Paste Texture: dense Core Configuration: orange Dark Core Retention: 0% Rim Shape: Rim Diameter: round 20 Rim Production Step: smoothed Thickness: 0.93 Firing Atmosphere: Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: ✓ Coil Breaks Inferred Vessel Form: bowl ✓ Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 3.2 2.9 1.8 Measurements: Parallel or V-shaped: parallel Shape: Direction: left Even/Uneven: Widthof Grooves: 1.5 2.7 1.9 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 419.3:4(2) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 27 Site Number: 38BU1800 Provenience/Catalog Number: 402.3:1 □ Body ✓ Rim Decoration: Plain Type Name: Stallings 10% Number of Sherds: 9 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 5 Aplastic Density: heavy Paste Texture: dense Core Configuration: dark grey Dark Core Retention: 0% Rim Shape: Rim Diameter: round 32 Rim Production Step: smoothed Thickness: 1.18 Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior/exterior Coil Breaks Inferred Vessel Form: simple bowl Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 402.3:1(2) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 407.3:1(7) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 28 Site Number: 38BU1800 Provenience/Catalog Number: 612.1:1 □ Body ✓ Rim Decoration: **Punctate** Type Name: Stallings 10% Number of Sherds: 20 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 15 Aplastic Density: heavy Paste Texture: dense Core Configuration: black to orange Dark Core Retention: 50% Rim Shape: Rim Diameter: round 40 Rim Production Step: 0.84 smoothed Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior/exterior Coil Breaks Inferred Vessel Form: simple bowl Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: near rim Type: Spacing: 0 Shape: short dashes Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Measurements: Parallel or V-shaped: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 411.3:1(1) Prov/Cat: 416.4:1(2) Prov/Cat: Prov/Cat: Prov/Cat: 416.4:2(5) 411.3:2(1) Prov/Cat: Prov/Cat: 411.2:3(2) Prov/Cat: 612.1:1(9)

All measurements in mm. Vessel Number: 29 Site Number: 38BU1800 Provenience/Catalog Number: 405.4:1 □ Body ✓ Rim Decoration: Random incised Type Name: Stallings 5% Number of Sherds: 5 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 80 Aplastic Density: light Paste Texture: sugary Core Configuration: orange to black to orange Dark Core Retention: 50% Rim Shape: Rim Diameter: flat 48 Rim Production Step: 0.76 smoothed Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior Coil Breaks Inferred Vessel Form: simple bowl Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Measurements: Parallel or V-shaped: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 405.4:1(2) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 417.4:1(2) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 30 Site Number: 38BU1800 Provenience/Catalog Number: 417.3:1 ☐ Body ✓ Rim Decoration: Plain Type Name: Stallings 2% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 20 Aplastic Density: heavy Paste Texture: sugary Core Configuration: black to brown to orange Dark Core Retention: 10% Rim Shape: Rim Diameter: flat 24 Rim Production Step: 0.98 smoothed Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: simple bowl ✓ Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Suspension hole. Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 417.3:1(2) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 31 Site Number: 38BU1800 Provenience/Catalog Number: 607.1:1 ☐ Body ✓ Rim Decoration: Burnished Type Name: Stallings 1% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: c sand Aplastic Shape: Minority Density: 60 Aplastic Density: light Paste Texture: dense Core Configuration: black to brown Dark Core Retention: 25% Rim Shape: Rim Diameter: round 18 Rim Production Step: 0.83 smoothed Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: simple bowl Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 607.1:1(2) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 32 Site Number: 38BU1800 Provenience/Catalog Number: 406.5:1 □ Body ✓ Rim Decoration: **Punctate** Type Name: Stallings 2% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 12 Aplastic Density: light Paste Texture: sugary Core Configuration: orange to black to orange Dark Core Retention: 80% Rim Shape: Rim Diameter: flat Rim Production Step: 1.05 smoothed Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: simple bowl Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: near rim Type: Spacing: 0 Shape: small circles Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 406.5:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 402.6:2(1) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 33 Site Number: 38BU1800 Provenience/Catalog Number: 402.4:1 □ Body ✓ Rim Decoration: Plain Type Name: Stallings 2% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 20 Aplastic Density: light Paste Texture: sugary Core Configuration: black Dark Core Retention: 40% Rim Shape: Rim Diameter: round 18 Rim Production Step: smoothed Thickness: 1.11 Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior Coil Breaks Inferred Vessel Form: simple bowl ✓ Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 402.4:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 406.3:5(1) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 34 Site Number: 38BU1800 Provenience/Catalog Number: 403.7:2 ☐ Body ✓ Rim Decoration: Plain Type Name: Stallings 2% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 20 Aplastic Density: light Paste Texture: sugary Core Configuration: orange to black to orange Dark Core Retention: 25% Rim Shape: Rim Diameter: round Rim Production Step: smoothed 0.94 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: simple bowl ✓ Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 403.7:2(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 414.3:2(1) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 35 Site Number: 38BU1800 Provenience/Catalog Number: 413.4:1 ✓ Body  $\square$  Rim Decoration: **Punctate** Type Name: Stallings 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 5 Aplastic Density: heavy Paste Texture: sugary Core Configuration: brown to grey to orange Dark Core Retention: 10% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: body Type: Spacing: 0 Shape: small circles Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Incised lines connecting punctates. Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 413.4:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 36 Site Number: 38BU1800 Provenience/Catalog Number: 408.4:1 □ Body ✓ Rim Decoration: Plain Type Name: Stallings 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 15 Aplastic Density: light Paste Texture: sugary Core Configuration: black to orange Dark Core Retention: 75% Rim Shape: Rim Diameter: round 15 Rim Production Step: smoothed Thickness: 1.32 Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: exterior Coil Breaks Inferred Vessel Form: simple bowl ✓ Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 408.4:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 37 Site Number: 38BU1800 Provenience/Catalog Number: 45.1:1 ☐ Body ✓ Rim Decoration: Plain Type Name: Stallings 2% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: Aplastic Density: light Paste Texture: sugary Core Configuration: orange to black to orange Dark Core Retention: 50% Rim Shape: Rim Diameter: round Rim Production Step: smoothed 1.38 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: simple bowl ✓ Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 45.1:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 401.5:1(1) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 38 Site Number: 38BU1800 Provenience/Catalog Number: 415.1:1 ☐ Body ✓ Rim Decoration: Plain Type Name: Stallings 1% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: Aplastic Shape: Minority Density: Aplastic Density: Paste Texture: sugary Core Configuration: orange to black to tan Dark Core Retention: 70% Rim Shape: Rim Diameter: round Rim Production Step: smoothed 0 Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Shoulder/Base Form: Fire Clouding Fire Clouding Placement: exterior Coil Breaks Inferred Vessel Form: ✓ Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 415.1:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 415.2:3(1) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 39 Site Number: 38BU1800 Provenience/Catalog Number: 39.1:1 Body  $\square$  Rim Decoration: **Punctate** Type Name: Stallings 3% Number of Sherds: 4 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 12 Aplastic Density: light Paste Texture: sugary Core Configuration: red to black to orange Dark Core Retention: 25% Rim Shape: Rim Diameter: round Rim Production Step: notched 0 Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: exterior Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: body Type: Spacing: 0 Shape: tiny circles Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Measurements: Parallel or V-shaped: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 39.1:1(3) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 39.1:2(1) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 40 Site Number: 38BU1800 Provenience/Catalog Number: 403.3:1 ✓ Body  $\square$  Rim Decoration: **Punctate** Type Name: Stallings 5% Number of Sherds: Percentage of Vessel: 6 Aplastic Type: fiber Aplastic Size: Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 10 Aplastic Density: light Paste Texture: sugary Core Configuration: black to orange Dark Core Retention: 50% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: body Type: Spacing: 0 Shape: short dashes Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 403.3:1(3) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 411.3:6(3) Prov/Cat: Prov/Cat: Prov/Cat:

Vessel Number:	41	7 1111000	surements in min.		Site N	lumber	: 3	38BU1	800
Provenience/Catalog N	lumber:	416.5:1			✓ [	Body		Rim	
Decoration: Slipped			Type Name	: Stall	ings				
Percentage of Vessel:	3%		Number of	Sherds:		5			
Aplastic Type: fiber Aplastic Size: Aplastic Shape: Aplastic Density: heavy Core Configuration: black to Rim Shape: Rim Production Step:	o orange		Minority Ap Minority De Paste Text Dark Core Rim Diame Thickness:	ensity: : ure: : Retention	i/m sand 3 sugary :	50 % 0			
Firing Atmosphere:  Sooting Sooting P Fire Clouding Fire Cloud Coil Breaks  Smoothed Interior Surface Treatment: Use Wear:	lacement: ding Placeme slipped		Overstamp Shoulder/B Inferred Ve Type of Wear:	ase Form					
Complicated Stamped		Cord Marked		Punctate					
Type: Number of Lines: Size:	0	Width: Spacing: S/Z Twist:		Location: Shape:	-				
Check Stamped			Simple Stamped						
Check Stamp Size: Measurements: Shape: Even/Uneven:			Width of Lands: Parallel or V-shaped Direction: Widthof Grooves:	:	0	)	0	0	
Incised				Fabr	ic Impre	ssed			
Measurements: 0  Rim Fold Width:	0 0	Color: Location:	<u>d</u>	Warp Weft Warp	to Warp Width: Width: Spacing Spacing	g:	0 0 0	0 0 0	0 0 0
Additional Comments:									
Provenience/Catalog (Cour	-	rds attributed to	vessel.	Prov/Ca	t:				
Prov/Cat: Prov/Cat:		Prov/Cat: Prov/Cat:		Prov/Ca Prov/Ca					

All measurements in mm. Vessel Number: 42 Site Number: 38BU1800 Provenience/Catalog Number: ☐ Body ✓ Rim 5.1:3 Decoration: Plain Type Name: Wilmington 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: grog Aplastic Size: medium Minority Aplastic: f/m sand Aplastic Shape: Minority Density: 20 Aplastic Density: Paste Texture: sugary Core Configuration: light brown to tan Dark Core Retention: 0% Rim Shape: Rim Diameter: round 20 Rim Production Step: 0.68 smoothed Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior/exterior ✓ Coil Breaks Inferred Vessel Form: bowl ✓ Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: Additional Comments: Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 5.1:3(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 43 Site Number: 38BU1800 Provenience/Catalog Number: 419.2:1 □ Body ✓ Rim Decoration: Plain Type Name: Refuge 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: Minority Aplastic: coarse vc sand Aplastic Shape: subround Minority Density: Aplastic Density: 40 Paste Texture: sugary Core Configuration: dark grey to orange Dark Core Retention: 0% Rim Shape: Rim Diameter: round 18 Rim Production Step: smoothed to exterior Thickness: 1.09 Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: bowl Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 419.2:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 44 Site Number: 38BU1800 Provenience/Catalog Number: 419.3:1 ☐ Body ✓ Rim Decoration: Plain Type Name: Refuge 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: medium Minority Aplastic: vc sand Aplastic Shape: round Minority Density: Aplastic Density: 60 Paste Texture: sugary Core Configuration: orange to brown Dark Core Retention: 0% Rim Shape: Rim Diameter: round 22 Rim Production Step: smoothed Thickness: 1 Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: ✓ Coil Breaks Inferred Vessel Form: bowl Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 419.3:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

Vessel Number: 45	All meas	surements in mm.	Site Number	er: 3	38BU18	300
Provenience/Catalog Number:	5.1:5		$\square$ Body	✓	Rim	
Decoration: Simple Stampe	d	Type Name	: Refuge			
Percentage of Vessel:	8%	Number of S	Sherds: 5			
Aplastic Type: sand Aplastic Size: coarse Aplastic Shape: subround Aplastic Density: 20 Core Configuration: orange Rim Shape: flat Rim Production Step: smoothed Firing Atmosphere:  Sooting Sooting Placement: Fire Clouding Fire Clouding Place Coil Breaks		Minority Ap Minority De Paste Textu Dark Core I Rim Diamer Thickness: Overstampi Shoulder/Ba	nsity: ure: dense Retention: 0 % ter: 34 1.03 ing: ase Form:			
Smoothed Interior Surface Treatment: smooth	hed	mienea ve.	SSELLOTHI. DOWN			
Use Wear:	•	Type of Wear:				
Complicated Stamped	Cord Marked	<u>!</u>	Punctate			
Type: Number of Lines: 0 Size:	Width: Spacing: S/Z Twist:	-	Location: Shape:			
Check Stamped		Simple Stamped				
Check Stamp Size: Measurements: Shape: Even/Uneven:		Width of Lands: Parallel or V-shaped: Direction: Widthof Grooves:	0 0	0	0	
Incised			Fabric Impressed	_		
Measurements: 0 0  Rim Fold Width: 0  Additional Comments:	Slipped/Filme 0  Color: Location:	<u>d</u>	Warp to Warp: Warp Width: Weft Width: Warp Spacing: Weft Spacing:	0 0 0	0 0 0	0 0 0
Provenience/Catalog (Count) of all s	sherds attributed to	o vessel.	Prov/Cat:			
Prov/Cat: 5.1:5(2) Prov/Cat: 5.1:6(3) Prov/Cat:	Prov/Cat: Prov/Cat: Prov/Cat:		Prov/Cat: Prov/Cat: Prov/Cat:			

All measurements in mm. Vessel Number: Site Number: 38BU1800 46 Provenience/Catalog Number: □ Body ✓ Rim 5.1:5 Decoration: Simple Stamped Type Name: Refuge 10% Number of Sherds: 9 Percentage of Vessel: Aplastic Type: sand Aplastic Size: Minority Aplastic: very coarse f/m sand Aplastic Shape: subround Minority Density: 5 Aplastic Density: 15 Paste Texture: dense Core Configuration: brown to dark grey to orange Dark Core Retention: 0% Rim Shape: Rim Diameter: flat 56 Rim Production Step: smoothed Thickness: 1.15 Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: exterior ✓ Coil Breaks Inferred Vessel Form: bowl Smoothed Interior Surface Treatment: rough Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 5.1:5(4) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 5.1:6(5) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 47 Site Number: 38BU1800 Provenience/Catalog Number: 418.2:5 ✓ Body Rim Decoration: Burnished Type Name: Mississippian 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: medium Minority Aplastic: Aplastic Shape: subround Minority Density: Aplastic Density: 60 Paste Texture: sugary Core Configuration: brown Dark Core Retention: 0% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Shoulder/Base Form: Fire Clouding Fire Clouding Placement: ✓ Coil Breaks Inferred Vessel Form: ✓ Smoothed Interior Surface Treatment: burnished Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 tan interior Warp Width: 0 0 0 Color: black Weft Width: 0 0 0 Location: exterior Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 418.2:5(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: Site Number: 38BU1800 48 Provenience/Catalog Number: 604.1:1 ✓ Body  $\square$  Rim Decoration: Random Incised Type Name: Stallings 1% Number of Sherds: 6 Percentage of Vessel: Aplastic Type: fiber Aplastic Size: Minority Aplastic: Aplastic Shape: Minority Density: Aplastic Density: heavy Paste Texture: dense Core Configuration: orange to black to orange Dark Core Retention: 90% Rim Shape: Rim Diameter: square 28 Rim Production Step: smoothed Thickness: 9 Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: Coil Breaks Inferred Vessel Form: simple bowl Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 604.1:2(5) Prov/Cat: Prov/Cat: Prov/Cat: 604.1:1 Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 49 Site Number: 38BU1800 Provenience/Catalog Number: 418.3:2 ✓ Body  $\square$  Rim Decoration: Scraped Type Name: Refuge 2% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: medium Minority Aplastic: c sand Aplastic Shape: subround Minority Density: Aplastic Density: 32 Paste Texture: sugary Core Configuration: orange Dark Core Retention: 0% Rim Shape: Rim Diameter: Rim Production Step: Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior ✓ Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 418.3:2(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 50 Site Number: 38BU1800 Provenience/Catalog Number: 10.1:1 ✓ Body Rim Decoration: Complicated Stamped Type Name: Mississippian 1% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: sand Aplastic Size: Minority Aplastic: fine Aplastic Shape: subround Minority Density: Aplastic Density: 80 Paste Texture: sugary Core Configuration: dark grey Dark Core Retention: 0% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: □ Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: interior/exterior Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: curvilinear Type: Spacing: 0 Shape: Number of Lines: S/Z Twist: Size: fine **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 10.1:1(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 403.2:3(1) Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 51 Site Number: 38BU1800 Provenience/Catalog Number: 403.2:2 ✓ Body Rim Decoration: Complicated Stamped Type Name: Mississippian 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: medium Minority Aplastic: c sand Aplastic Shape: subround Minority Density: Aplastic Density: 40 Paste Texture: sugary Core Configuration: black to orange Dark Core Retention: 40% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: ✓ Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: curvilinear Type: Spacing: 0 Shape: Number of Lines: S/Z Twist: Size: fine **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 403.2:2(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 52 Site Number: 38BU1800 Provenience/Catalog Number: 402.2:2 ✓ Body Rim Decoration: Complicated Stamped Type Name: Mississippian 1% Number of Sherds: Percentage of Vessel: 1 Aplastic Type: sand Aplastic Size: Minority Aplastic: fine c sand Aplastic Shape: Minority Density: round Aplastic Density: 60 Paste Texture: sugary Core Configuration: black Dark Core Retention: 100% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: Fire Clouding Fire Clouding Placement: Shoulder/Base Form: ✓ Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: well smoothed Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: curvilinear Type: Spacing: 0 Shape: Number of Lines: S/Z Twist: Size: fine **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: 0 Warp to Warp: 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 402.2:2(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat:

All measurements in mm. Vessel Number: 53 Site Number: 38BU1800 Provenience/Catalog Number: 11.1:2 ✓ Body  $\square$  Rim Decoration: Cob Impressed Type Name: Irene SCV 1% Number of Sherds: 2 Percentage of Vessel: Aplastic Type: sand Aplastic Size: Minority Aplastic: fine c sand Aplastic Shape: subround Minority Density: Aplastic Density: 200 Paste Texture: sugary Core Configuration: black to brown Dark Core Retention: 30% Rim Shape: Rim Diameter: Rim Production Step: 0 Thickness: Firing Atmosphere: Sooting Sooting Placement: Overstamping: moderate Fire Clouding Fire Clouding Placement: Shoulder/Base Form: ✓ Coil Breaks Inferred Vessel Form: Smoothed Interior Surface Treatment: burnished Use Wear: Type of Wear: **Cord Marked Punctate Complicated Stamped** Width: 0 Location: Type: Spacing: 0 Shape: Number of Lines: 0 S/Z Twist: Size: **Check Stamped** Simple Stamped Check Stamp Size: Width of Lands: 0 0 0 Parallel or V-shaped: Measurements: Shape: Direction: Even/Uneven: Widthof Grooves: 0 **Fabric Impressed** Incised Slipped/Filmed Measurements: Warp to Warp: 0 0 0 0 0 Warp Width: 0 0 0 Color: Weft Width: 0 0 0 Location: Warp Spacing: Rim Fold Width: 0 Weft Spacing: **Additional Comments:** Provenience/Catalog (Count) of all sherds attributed to vessel. Prov/Cat: Prov/Cat: Prov/Cat: 11.1:2(1) Prov/Cat: Prov/Cat: Prov/Cat: Prov/Cat: 406.2:4(1) Prov/Cat: Prov/Cat: Prov/Cat:

Appendix C.
Radiocarbon Dating Analysis

Ms. Connie Huddleston Report Date: 5/21/2003

Material Received: 4/24/2003

## Brockington and Associates, Incorporated

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 178645 SAMPLE: 38BU1800402310	3560 +/- 60 BP	-25.0* o/oo	3560 +/- 60* BP
ANALYSIS: Radiometric-Standard MATERIAL/PRETREATMENT: (c	charred material): acid/alkali/acid	2(00)	
2 SIGMA CALIBRATION : C	al BC 2040 to 1740 (Cal BP 3990 to	o 3690) 	
Beta - 178646 SAMPLE : 38BU18006032015	1050 +/- 60 BP	0.0* o/oo	1460 +/- 60* BP
ANALYSIS: Radiometric-Standard of MATERIAL/PRETREATMENT: (\$2 SIGMA CALIBRATION: C		900)	
Beta - 178647 SAMPLE : 38BU18006051014	1960 +/- 70 BP	0.0* 0/00	2370 +/- 70* BP
ANALYSIS: Radiometric-Standard	-		
MATERIAL/PRETREATMENT: (\$2 SIGMA CALIBRATION: C	al BC 200 to Cal AD 120 (Cal BP)	2150 to 1820)	
Beta - 178648 SAMPLE: 38BU18006081014	690 +/- 60 BP	0.0* o/oo	1100 +/- 60* BP
ANALYSIS : Radiometric-Standard MATERIAL/PRETREATMENT : (s	-	550)	

(Variables: est. C13/C12=-25:lab.mult=1)

Laboratory number: Beta-178645

Conventional radiocarbon age1: 3560±60 BP

2 Sigma calibrated result: Cal BC 2040 to 1740 (Cal BP 3990 to 3690)

(95% probability)

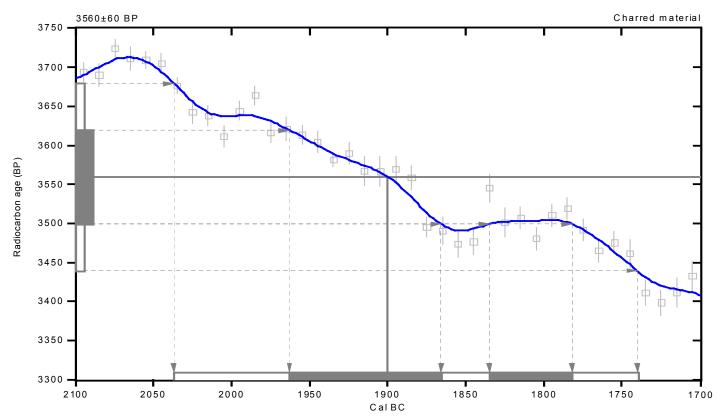
1 C13/C12 ratio estimated

#### Intercept data

Intercept of radiocarbon age

with calibration curve: Cal BC 1900 (Cal BP 3850)

1 Sigma calibrated results: Cal BC 1960 to 1870 (Cal BP 3910 to 3820) and (68% probability) Cal BC 1840 to 1780 (Cal BP 3780 to 3730)



#### References:

Database used

Calibration Database

Editorial Comment

Stuiver, M., van der Plicht, H., 1998, Radiocarbon 40(3), pxii-xiii

INTCAL98 Radiocarbon Age Calibration

Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083

Mathematics

A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

(Variables: est. C13/C12=0:Delta- $R=0\pm0$ :Glob res=-200 to 500:lab. mult=1)

Laboratory number: Beta-178646

Conventional radiocarbon age1: 1460±60 BP

(local reservoir correction not applied)

2 Sigma calibrated result: Cal AD 800 to 1050 (Cal BP 1140 to 900)

(95% probability)

1 C13/C12 ratio estimated

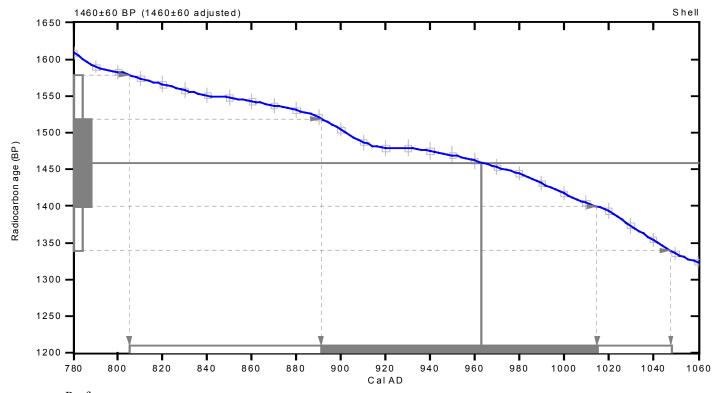
Intercept data

Intercept of radiocarbon age

with calibration curve: Cal AD 960 (Cal BP 990)

1 Sigma calibrated result: Cal AD 890 to 1020 (Cal BP 1060 to 940)

(68% probability)



References:

Database used

Calibration Database

Editorial Comment

Stuiver, M., van der Plicht, H., 1998, Radiocarbon 40(3), pxii-xiii

INTCAL98 Radiocarbon Age Calibration

Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083

Mathematics

A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

(V ariables: est. C13/C12=0:D elta-R=0 $\pm$ 0:G lob res=-200 to 500:lab. mult=1)

Laboratory number: Beta-178647

Conventional radiocarbon age<sup>1</sup>: 2370±70 BP

(local reservoir correction not applied)

2 Sigma calibrated result: Cal BC 200 to Cal AD 120 (Cal BP 2150 to 1820)

(95% probability)

1 C13/C12 ratio estimated

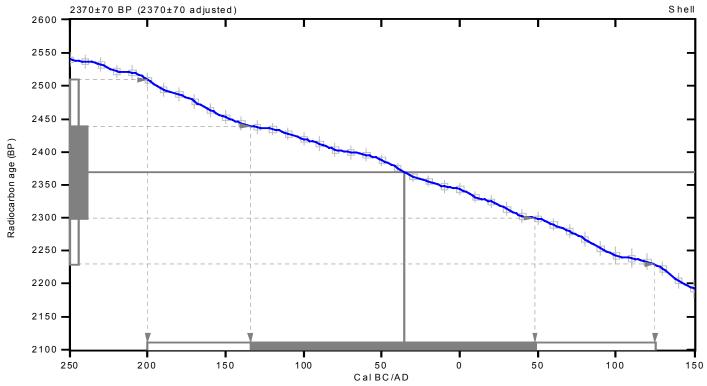
Intercept data

Intercept of radiocarbon age

with calibration curve: Cal BC 40 (Cal BP 1990)

1 Sigma calibrated result: Cal BC 130 to Cal AD 50 (Cal BP 2080 to 1900)

(68% probability)



References:

Database used

Calibration Database

Editorial Comment

Stuiver, M., van der Plicht, H., 1998, Radiocarbon 40(3), pxii-xiii

INTCAL98 Radiocarbon Age Calibration

Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083

Mathematics

A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

(Variables: est. C13/C12=0:Delta- $R=0\pm0$ :Glob res=-200 to 500:lab. mult=1)

Laboratory number: Beta-178648

Conventional radiocarbon age<sup>1</sup>: 1100±60 BP

(local reservoir correction not applied)

2 Sigma calibrated result: Cal AD 1200 to 1400 (Cal BP 750 to 550)

(95% probability)

1 C13/C12 ratio estimated

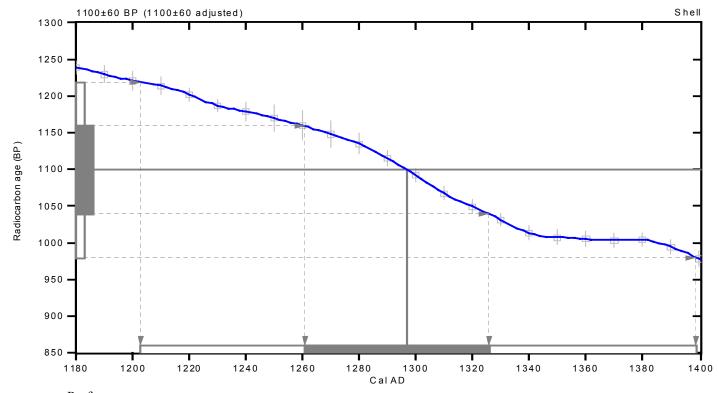
Intercept data

Intercept of radiocarbon age

with calibration curve: Cal AD 1300 (Cal BP 650)

1 Sigma calibrated result: Cal AD 1260 to 1330 (Cal BP 690 to 620)

(68% probability)



References:

Database used

Calibration Database

Editorial Comment

Stuiver, M., van der Plicht, H., 1998, Radiocarbon 40(3), pxii-xiii

INTCAL98 Radiocarbon Age Calibration

Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083

Mathematics

A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

Appendix D. Faunal Analysis by Alana Lynch

#### 38BU1800 Faunal Analysis

Due to the extremely low NISP (n=12) for this site, no analysis of the material is possible. It is too small to even confidently standardize and compare with similar sites. I have provided the methods used for the identification process. I have also provided the tables created from the data. However, due to the low NISP, none of this data should be considered reliable nor informative.

#### Methods and Results

The faunal remains included in this analysis are from 0.25 inch screened and flotation samples (Table 1). The faunal collection from 38BU1800 was examined at the Florida Museum of Natural History's Zooarchaeology Laboratory, located on the campus of the University of Florida in Gainesville; Ms. Sylvia Scudder is curator of the faunal collections. The faunal analysis was performed using standard zooarchaeological methods, as outlined below.

Table 1. 38BU1800 Proveniences Which Yielded Faunal Remains.

Provenience	Quantity*	Weight, grams**
17	1	42.9
25		0.2
29	1	3.2
404	2	7.1
405	1	0.3
406		0.3
408	1	3.4
409	1	1.2
412	1	8.9
417		0.4
608	2	
609	2	

<sup>\*</sup> Blanks indicate UID Vertebrate remains, only; these are not counted.

<sup>\*\*</sup> Blanks indicate weight smaller than 0.10 gram.

There are several commonly used zooarchaeological methods, including: Number of Identified Specimens (NISP); Minimum Number of Individuals (MNI); allometric calculations of meat weight (biomass); and observed modifications. The Number of Identified Specimens (NISP) represents the number of bones identified. NISP is complied for each taxon, and specimens that cross-mend are counted as single specimens. Specimens which are too fragmented for positive identification are assigned to the Unidentifiable (UID) Vertebrate category, and are not counted.

NISP represents the total number of bones identified to a taxonomic category. While this is an effective manner in which to analyze a small set of data (under 1600 bones), the data often proves to be misleading. For example, the recovery of numerous rabbit bones, and a few white-tailed deer bones may superficially indicate that rabbit was the preferred food choice. However, the amount of meat and by-products that can be taken from even one deer is significantly more than what could be recovered from 10 rabbits. Furthermore, certain types of animals, as well as certain bones of animals, have a higher survival, recovery, and identification rate than others. Abundance of bone should not be mistaken for a distinct exploitation pattern.

Human and non-human taphonomic processes typically compromise the survival rate of small and fragile bones; such as those from rodents, fish and bird. Such bones are easily broken during butchering, consumption, and disposal. However, their small size, either whole or broken, tend to make them generally less susceptible to taphonomic processes than larger, sturdier bones; such as those from larger mammals, or turtle carapaces and plastrons. Mammal and turtles bones, while more dense, have greater surface areas. Their survival is usually hindered more by the taphonomic effects of: freeze-thaw cracking; displacement by flooding and erosion; abrasion by coarse sand; crushing from trampling and plowing; etc. Paradoxically, it is the small size of fish and

bird bone that allow them to better survive the geological forces that usually inhibits their recovery and identification. Small bones, though, also tend to slip easily through the 0.25 inch screens typically used during excavation. A lack of distinctive landmarks remaining on fragments of bone often requires there placement in the UID categories. Consequently, the UID NISP for fish and bird tend to be very high, while the count for the families and species within the classes tend to be very small.

In an attempt to mitigate disparity between NISP and the actual exploitation of animals, White (1953) developed the calculation of MNI. The MNI calculation helps to determine the *least* number of individual animals represented by the NISP. However, MNI is entirely reliant upon NISP. As we have seen, NISP can be influenced by human and non-human factors. Just as a high number of rabbit bones and a few deer bones can falsely indicate that rabbit had a greater importance to the diet, an MNI estimation of 10 rabbits and one deer may also overemphasize the importance of rabbit in relation to deer. Furthermore, since MNI is an estimate based on paired elements, tooth wear, and degree of epiphyseal fusion, an accurate calculation requires at least 1600 bones (Reitz and Wing 1999).

Aggregating all of the data into one analytical whole, or the "minimum distinction" method presents the most conservative estimate of MNI from a site (Grayson 1973:434). Conversely, in the "maximum distinction" method, the data are aggregated into several separate analytical units. Here, a smaller number of bones are used, but a higher MNI is produced. It is important to reiterate that MNI is an estimate of the *least* number of individual animals present at a site (Crabtree 1985:77). It does not indicate that the entire animal was present or consumed by the residents (Lyman 1979:539). Since the NISP data from 38BU1800 is significantly less then 1600, the minimum

distinction method was employed for this analysis. It should be noted, however, that due to the extremely low NISP for this site, the MNI calculations are not considered reliable.

Biomass calculations were developed, in part, to counteract the limitations of MNI and to provide a more accurate reflection of the amount of edible meat available (Reitz et al., 1987:314). Estimates are based on the allometric principle that the relationships between body mass, skeletal mass, and skeletal dimensions change with increasing body size. This scale effect results from a need to compensate for weakness in the basic structural material; in this case bone. The relationship between body weight and skeletal weight is described by the allometric equation:  $Y = aX^{b}$  (Simpson et al. 1960:397). This formula can be used to describe allometry for many biological phenomena (Gould 1966, 1971). This is a logarithmic equation that can be simplified to: log Y = log a + b(log X), where: a = the Y-intercept and b = the slope. Therefore, Y (the unknown) is the total weight, standard length, or soft tissue weight. The variable X is the skeletal weight. The values for the two givens, a and b, are obtained from calculations based on the comparative collections at the Florida Museum of Natural History and the Georgia Museum of Natural History. No data is available for a number of reptiles and amphibians, including frogs, geckos, skinks, etc.

As with MNI, biomass is skewed towards assuming the entire animal was available for consumption, and as with NISP, the weight for a taxon is based on the identification of the bones. Unfortunately, taphonomic processes - such as carnivore and rodent gnawing - often reduce the original weight of the bone. Similarly, off-site carcass processing and on-site consumption of only portions of the meat, and vice-versa, can cause distinct misinterpretations of animal use. It is not currently possible to determine how much bone weight is lost in some manner before the identification of a given specimen. Again, given the small NISP for 38BU1800, the biomass data

is not considered an accurate reflection of the amount of meat consumed by the residents of the site.

*Identification*. The faunal specimens recovered from 38BU1800 were identified in terms of elements represented, the portion recovered, and side. The NISP and weight (in grams) was recorded. Specimens that cross-mend were counted as single specimens. Individual bones were identified to the lowest taxonomic level to which they could confidently be assigned. A record was made of identified elements, noting age, sex, and modifications when observed. This data is detailed in Table 2.

Table 2. Species List for 38BU1800.

TAXON	NISP	Weight, g.	MNI
UID Fish	4		
Bagre marinus Hardhead catfish	1	1.2	1
UID Turtle	1	0.3	
Emydidae Box/water Turtles	1	42.9	1
UID Mammal	2	3.8	
Artiodactyl* Even-toed hoofed ungulates	1	6.5	
Odocoileus virginanus White-tailed deer	2	12.3	1
UID Vertebrate		0.9	
Total	12	67.9	3

<sup>\*</sup> Believed to be un-associated with occupation.

*Bone Modifications*. Observed modifications refer to markings on bone that do not occur naturally. Burning, chemical etching, and rodent gnawing are examples. They can occur during procurement, preparation (butchering and cooking), consumption, disposal, interment, excavation, and even laboratory processing. They are important indicators of distinct human behaviors, as well as past and

on-going post-depositional processes at the site. The observed modifications for 38BU1800 are detailed in Table 3.

The following modifications were observed from 38BU1800: burned, calcined, root etched, weathered, and sawed. Burning typically results from the bone being exposed to extreme heat and/or flame. This exposure may occur during food preparation (i.e., cooking); however exposure of the bone to open flame and/or heat high enough to cause burning could destroy the meat. While burns on the shaft ends may be evidence of roasting, it is more likely that burning of the bone is due to discard of the bone into fire or coals once the meat has been removed. A bone burned at extremely high temperatures can cause *calcination*, indicated by a blue-gray discoloration.

Weathering results from the effects of the elements upon a bone. Weathered specimens have been demineralized, with cracked and/or flaking compact bone (the outer layer) (Tappen 1969, 1976; Tappen and Peske 1970). Remains that are left unburied are subject to bleaching by the sun; a bone that is partially submerged in water is subject to erosion. Remains at sites in the coastal southeast are subject to numerous weather effects, such as freeze/thaw, high tides, flooding, extreme heat and humidity, the destructive nature of sand, and highly acidic soils. Small, dense mammalian bones usually endure the effects of weathering better than the lighter bones of fish and birds.

Table 3.Observed Modifications from 38BU1800.

TAXON		Burned	Calcined	Weathered	TOTALS
UID Bony Fish		1			1
UID Turtle				1	1
UID Mammal				1	1
White-tailed deer				1	1
UID Vertebrate		5	4		9
	TOTALS	6	4	3	13

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